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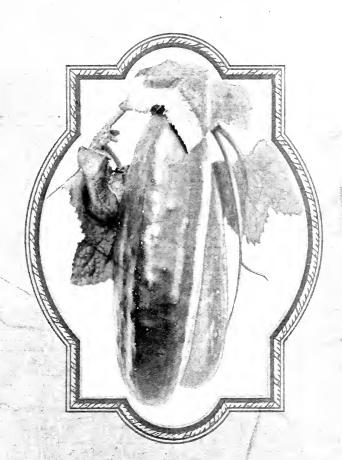
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1924

U. B. Department of Agricult

# SEED ANNUAL



# THE AMERICAN SEED COMPANY

Fort Worth, Tex., U. S. A.

### To Our Customers:

In submitting for your consideration our new catalog for this season we want to sincerely thank those who have favored us with orders in the past and that assisted in building up our ever growing business.

We believe our success is due to the high quality of seeds we send out, coupled with square dealing, and that seed planters are coming more and more to realize the importance of planting the best seed obtainable.

From a small beginning our business has attained large proportions. Our Famous BELL BRAND package seed are known from coast to coast and from the birth of these little packets under the BELL BRAND, fifteen years ago, we have been glad to be identified with them, and from the beginning we have staked our entire future on the quality of our seeds. The fact that this company is growing faster than any other seed house in the world should be proof to the hundreds of thousands who buy BELL BRAND Seed of this fact.

We assure you we will be just as diligent in the future as we have been in the past, and we shall use every effort possible to maintain that high standard of quality.

To those whom this book will fall into the hands of for the first time we extend greetings and hope to be favored with your orders.

To those of our old customers we wish again to thank for their orders and for the interest they have taken in the upbuilding of this business, and we shall look forward with interest for the arrival of their further orders the coming season.

Yours very truly,

### The American Seed Company

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### Index

Planting and Grow- ing Directions1-2
VEGETABLE SEEDS
Asparagus 3
Beans4-8
Beets8-9
Borecole 19
Broccoli
Cabbage9-11
Carrots 12
Carrots
Corn Salad 14
Cress
Collards 14
Corn, Sweet 16
Cucumber17-18 Gumbo25
Chives 42
Chicory 42
Dandelion 42
Endive
Garlic Sets 41 Horseradish Roots. 42
Herbs, Aromatic and Medicinal42-43
Jerusalem Roots 41
Kale or Borecole 19 Kohlrabi 19
Leek
Muskmelon23-25 Mustard 25
Okra or Gumbo25
Onion Seed26-27
Onion Sets 41
Peas28-30
Parsley
Parsnip 31 Pepper 32

Trucking as	
Roots41-	-42
Radish 33-	-35
Phuharh or Pie	00
Tillubard of fre	9.5
Plant	99
Roots41- Radish33- Rhubarb or Pie Plant Rhubarb Roots	42
Colaifu on Tropoto	
ble Oyster	35
Spingah	26
Spinach36	977
Squasi	-01
$\begin{array}{lll} \textbf{Tobacco} & \dots & \dots & \dots \\ \textbf{\underline{T}omatoes} & \dots & \dots & 37 \end{array}$	37
Tomatoes37	-39
Turnin 39-	-41
Vegetable Oyster	35
Vegetable Oyster Vegetable Plants	42
Tre-t	22
Watermelon21-	- 43
Wild Rice	41
FLOWER SEEDS	•
	•
Ageratum	43
Ageratum	43
Ageratum	43 43
Ageratum	43 43 44
Ageratum	43 43 44 44
Ageratum	43 43 44 44 44
Ageratum Alyssum Amoranthus Antirrhinum Asters Balsam	43 43 44 44
Ageratum Alyssum Amoranthus Antirrhinum Asters Balsam	43 43 44 44 44
Ageratum Alyssum Amoranthus Antirrhinum Asters Balsam	43 43 44 44 44 44
Ageratum Alyssum Amoranthus Antirrhinum Asters Balsam	43 44 44 44 44 44 44
Ageratum Alyssum Amoranthus Antirrhinum Asters Balsam	43 44 44 44 44 44 44 44
Ageratum Alyssum Amoranthus Antirrhinum Asters Balsam	43 44 44 44 44 44 44 44 44
Ageratum Alyssum Amoranthus Antirrhinum Asters Balsam	43 44 44 44 44 44 44 44 44
Ageratum Alyssum Amoranthus Antirrhinum Asters Balsam	43 44 44 44 44 44 44 44 44 44
Ageratum Alyssum Amoranthus Antirrhinum Asters Balsam Columbine Calliopsis Coreopsis Candyturft Castor Bean Centaurea Chrysanthemum	43 44 44 44 44 44 44 44 44 44 44
Ageratum Alyssum Amoranthus Antirrhinum Asters Balsam Columbine Calliopsis Coreopsis Candyturft Castor Bean Centaurea Chrysanthemum	43 44 44 44 44 44 44 44 44 44 44 45
Ageratum Alyssum Amoranthus Antirrhinum Asters Balsam Columbine Calliopsis Coreopsis Candyturft Castor Bean Centaurea Chrysanthemum	43 44 44 44 44 44 44 44 44 44 44
Ageratum Alyssum Amoranthus Antirrhinum Asters Balsam Columbine Calliopsis Coreopsis Candyturft Castor Bean Centaurea Chrysanthemum	43 44 44 44 44 44 44 44 44 44 44 45
Ageratum Alyssum Anoranthus Antirrhinum Asters Balsam Columbine Calliopsis Coreopsis Candyturft Castor Bean Centaurea Chrysanthemum Carnation Cockscomb Cosmos	43 43 44 44 44 44 44 44 45 45
Ageratum Alyssum Anoranthus Antirrhinum Asters Balsam Columbine Calliopsis Coreopsis Candyturft Castor Bean Centaurea Chrysanthemum Carnation Cockscomb Cosmos	43 44 44 44 44 44 44 45 5 45
Ageratum Alyssum Amoranthus Antirrhinum Asters Balsam Columbine Calliopsis Coreopsis Candyturft Castor Bean Centaurea Chrysanthemum Carnation Cockscomb Cosmos Daisy Dianthus	43 44 44 44 44 44 44 44 45 545
Ageratum Alyssum Antirrhinum Antirrhinum Asters Balsam Columbine Calliopsis Coreopsis Candyturft Castor Bean Centaurea Chrysanthemum Carnation Cockscomb Cosmos Daisy Dianthus Eschscholtzia	433 444 444 444 444 444 445 455 455 455
Ageratum Alyssum Amoranthus Antirrhinum Asters Balsam Columbine Calliopsis Coreopsis Candyturft Castor Bean Centaurea Chrysanthemum Carnation Cockscomb Cosmos Daisy Dianthus Eschscholtzia Fox Glove	43 44 44 44 44 44 44 44 45 545

 Pie Plant
 35

 Prices
 31

 Pumpkins
 32-33

 Rutabagas
 41

Helanthus       4         Helichrysum       4         Hollyhock       4         Kochia       4         Larkspur       4         Lobelia       4         Myosotis       4         Marvel of Peru       4         Mignonette       4         Nicotiana       4         Nasturtium       4         Portulaca       4         Petunia       4         Poppies       4         Phlox       4         Salvia       4         Sensitive Plant       4         Sweet Peas       5         Stocks       4         Sweet William       4         Shasta Daisies       4	$\frac{1}{5}$ $\frac{1}$
Hollyhock	5 6 6 6 6 6 7 6 7 7 7 7 8 8 1
Kochia       4         Larkspur       4         Lobelia       4         Myosotis       4         Marvel of Peru       4         Mignonette       4         Nigella       4         Nicotiana       4         Nasturtium       4         Portulaca       4         Petunia       4         Pansy       4         Poppies       4         Phlox       4         Salvia       4         Sensitive       Plant         Sweet       Peas	66 667 67777 881
Lobella 4 Myosotis 4 Marvel of Peru 4 Mignonette 4 Nigella 4 Nicotiana 4 Nasturtium 4 Portulaca 4 Petunia 4 Poppies 4 Poppies 4 Pollox 4 Sensitive Plant 4 Sensitive Plant 4 Seveet Peas 5	
Lobella 4 Myosotis 4 Marvel of Peru 4 Mignonette 4 Nigella 4 Nicotiana 4 Nasturtium 4 Portulaca 4 Petunia 4 Poppies 4 Poppies 4 Pollox 4 Sensitive Plant 4 Sensitive Plant 4 Seveet Peas 5	666 667 6777 881
Nigella       4         Nicotiana       4         Nasturtium       4         Portulaca       4         Petunia       4         Pansy       4         Poppies       4         Phlox       4         Salvia       4         Sensitive       Plant         Sweet       Peas         5       5	100 000 0000
Nigella       4         Nicotiana       4         Nasturtium       4         Portulaca       4         Petunia       4         Pansy       4         Poppies       4         Phlox       4         Salvia       4         Sensitive       Plant         Sweet       Peas         5       5	6677777881
Nigella       4         Nicotiana       4         Nasturtium       4         Portulaca       4         Petunia       4         Pansy       4         Poppies       4         Phlox       4         Salvia       4         Sensitive       Plant         Sweet       Peas         5       5	67777 881
Nasturtium       4         Portulaca       4         Petunia       4         Pansy       4         Poppies       4         Phlox       4         Salvia       4         Sensitive       Plant       4         Sweet       Peas       5	7 6777 881
Portulaca       4         Petunia       4         Pansy       4         Poppies       4         Phlox       4         Salvia       4         Sensitive       Plant         Sweet       Peas         5	67777 881
Pansy       4         Poppies       4         Phlox       4         Salvia       4         Sensitive       Plant       4         Sweet       Peas       5	777 881
Pansy       4         Poppies       4         Phlox       4         Salvia       4         Sensitive       Plant       4         Sweet       Peas       5	77 88 1
Salvia 4 Sensitive Plant 4 Sweet Peas 5	788
Salvia 4 Sensitive Plant 4 Sweet Peas 5	8
Sweet reas	1
Sweet William 4	
Shasta Daisies 4	
Scabiosa 4	
Violet 4	8
Violet 4 Verbena 4	
Wall Flower 4 Wild Flower-Gar-	8
den 4	۶
Zinnias 4	8
CLIMBING VINES	
Balloon Vine 4	
Canary-Bird Vine 4 Coboea Scandens 4	
Clematis 4	9
Dolichos 4	-
Gourd 4	
Humulus Japonicus 4 Momordica 4	

Morning Glory ..... 49

1 8 6 7 .
Madeira
ers 49
Moon Flower 49
ers
Passiflora 49
Scarlet Runner 49
Tables 78
Wild Cucumber 49
SUMMER FLOWER- ING BULBS
Cannas 50
Dahlias 50
Elephant Ear 50
Gladiolus 50
FIELD SEEDS
Alfalfa59-60
Barley 65 Beans, Field54-55
Beans, Field54-55
Bermuda Grass 63
Carrots, Stock 52 Canadian Blue
Grass 62 Clover 60-61 Corn, Field 55-56 Corn, Pop 56 Corn, Broom 59
Clover60-61
Corn, Field55-56
Corn, Pop 56
Cotton 59
Cotton 58 Creeping Bent
Grass 63
English Blue Grass 62
Golf Link Mixture. 62
Italian Rye 62
Johnson Grass 63
Ky. Blue Grass 62
Lawn Grass Seed62-63 Lucerne56-60
Seed62-63
Lucerne56-60

Mangels and Sugar	
Beets	51
Beets	62
Millets	64
Oats Orchard Grass	65
Orchard Grass	63
Peanuts Seed Potatoes, Seed Seed Peas, Cow 53-Peas, Field 53-Pasture Grass	52
Potatoes, Seed	99
Seed Seed	53
Peas. Cow53-	-54
Peas, Field53-	-54
Pasture Grass	
Seed62- Perennial Blue	-64
Crass	62
Grass	61
Rutabagas and	-
Turnips for Stock	52
Red Top Grass	63
Rye	65
Rye	63
Rescue Grass	64
Sorghums57- Speltz or Emmer	-59
Speltz or Emmer	61
Sunflower Sudan Grass	63
Tall Meadow Oat	62
Timothy	64
Vetch	65
Wheat	65
Wheat	00
MISCELLANEOUS	
Brooders67-	
Fertilizers	76
Foreign Names of Vegetables	70
vegetables	10
Garden Tools	11

Insecticides and Fungicides ..... 76 Incubators ..... 67

Poultry Foods and

Supplies .......68-75

### **PLANTING AND GROWING DIRECTIONS**

LOCATION The garden should be located on a southern or southeastern slope, for the soil warms up earlier. It is better to have the garden up nearer the top than the bottom of the slope, for the air drainage is better in the former, and not so liable to be injured by early fall and late spring frosts. A dark colored sandy loam soil with a porous clay subsoil is the best type of soil to use, because it warms up earlier in the spring, can be worked quicker a rain, is easier to work and vegetables will grow better, especially the root crops. There are very few soils which will not grow some assortment of vegetables. There should not be any trees near, for their roots sap the food for some distance from their trunks.

SOIL PREPARATION The soil in the garden should be broken in the fall so that the manure and weeds will decompose. The soil in this state will absorb more rain. If the land has not been broken it would be best to break it immediately, or as early in the spring as possible. When the soil is broken up a disk harrow should follow the same day, so that the clods will not dry out and become hard. If the soil has been spaded, or forked up, it will be necessary to break the clods with a spade or fork at the same time. Vegetable seed need a good pulverized seed bed to obtain a high germination.

COMPANION CROPPING Companion cropping is the growing of two or more crops on the same land at one time. Where there is ample room to have a large garden companion cropping is not necessary, but when the space is limited companion cropping is advisable. Quick maturing crops like radishes, lettuce, Spinach, mustard and green onions can be grown between late maturing crops which are planted at proper distance, like early cabbage, cauliflower, tomatoes, sweet corn, carrots, parsnips and Celery. These quick muturing vegetables will mature and be harvested before the late maturing crops become large enough to occupy the soil. Some of the crops that can be grown this way are lettuce in rows between cabbage, beets in rows between cabbage, lettuce in rows between beets, radishes or lettuce in rows between carrots. By keeping in mind the numbers of days it takes vegetables to mature and their habit of growth one can easily figure out a fine companion cropping system which will save time, labor and space.

FERTILIZER Manure is one of the best fertilizers that can be placed in the garden. Manure should be harrowed in and then plowed under if the best results are wanted. About 20 to 25 tons of manure to the acre should be applied. Wood ashes is another good fer-It contains potash and lime. Lime, whether added in the form of ashes or burned limestone, neutralizes soil acidity, improves the physical character of the soil, promotes decomposition and makes plant food available. Lime and manure should never be applied to the soil together, for lime releases the ammonia in the manure. Apply the manure and plow under, then place the lime on top of the soil and harrow it in. Cottonseed meal and acid prosphate aded to the soil are also fertilizers to use for the general garden. Green cover crops, grown and turned under, are also good.

### DISTANCE AND DEPTH OF PLANTING

In planting vegetable seeds one should know something of the habit of growth of the vegetables planted so that there will not be any unnecessary vacant land between the plants and rows. The distance of the planting also depends upon the improvements used. If horse-drawn implements are used the rows should be from 34 to 36 inches apart.

The depth of planting depends upon the size of the seeds, the condition the soil is in, and the season of the year. In general, seeds should be planted about four times as deep as their thickness. The depth should be greater in the summer than the spring. In moist, cool soil, planting should be shallower than in dry, warm soil.

The distance to leave the plants, and depth to sow the seeds, which should be allowed the various crops in a garden where hand cultivation is used: Radishes, leaf lettuce, spinach, mustard and onion seed in drills 12 to 15 inches apart, plants 2 inches apart,  $\frac{1}{4}$  to  $\frac{1}{2}$  inch deep.

Onion plants and sets in drills 16 to 18 inches apart, 4 to 6 inches between plants,  $1\frac{1}{2}$  to 2 inches deep; carrots and turnips in drills 16 to 18 inches apart; parsnips, salsify, parsley, chard, kale, in drills 12 to 15 inches apart,  $\frac{1}{2}$  to  $\frac{3}{4}$  inches deep. Carrots, parsley, parsnips and salsify germinate slowly, and radish seed should be sown to mark the rows in order to allow cultivation before they appear.

Peas in double rows 8 to 12 inches apart,  $2\frac{1}{2}$  feet being allowed between each pair of rows. Single rows 18 to 20 inches apart, 2 inches for the first crop and afterward depth according to season. The hotter the season the deeper the seed should be planted. When planted 5 or 6 inches deep do not place back all the soil at once, but about 2 inches at first and then throw more soil to the plants as they grow larger.

Potatoes in rows 30 to 36 inches apart, 12 to 15 inches between hills in the rows, 4 to 5 inches deep.

Bush beans in rows 18 inches apart and hills 8 inches apart in rows  $1\frac{1}{2}$  to 2 inches deep.

Pole beans in rows 4 feet apart and hills 1 to 2 feet apart in rows, 1/2 to 2 inches deep.

Sweet corn in rows 3 feet apart and hills 18 inches apart, 2 inches deep.

Cantaloupes, cucumbers and summer squash in hills  $\pm$  by 5 feet, 1 inch deep and 8 to 12 seed to the hill.

Watermelon, pumpkins and winter squash in hills 6 by 8 feet, 1 inch deep and 8 to 10 seeds to the hill.

The seed should be covered with moist soil immediately after planting. It is best to firm the soil around the seeds.

DISTANCES FOR TRANSPLANTING: Distance to plant plants in open fields that were started in hotbeds and cold frames or started in the open field:

Cabbage, cauliflower and Brussels Sprouts in rows 3 feet apart and  $1\frac{1}{2}$  feet in the rows.

Peppers in rows, 30 inches and 18 inches in the rows.

Egg plants in rows,  $3\frac{1}{2}$  feet and 30 inches in the rows.

Head lettuce in rows, 18 inches and 12 inches in the rows.

Tomatoes in rows, 3 to 4 feet apart and  $21\!/_2$  to 3 feet in the rows.

Sweet Potatoes in rows, 3 to  $3\frac{1}{2}$  feet and 18 inches in the rows.

Celery, according to method of bleaching, in rows 30 inches apart and 6 inches in the rows, are good distances to allow.

Petsal, or Chinese Cabbage, in rows, 24 to 30 inches and 8 to 12 inches in the rows.

TRANSPLANTING

To obtain the best results many of the vegetables have to be started to growing early in the spring in a protected place and then transplanted to the field after the danger of frost has passed. This may be in the hotbed, cold frame, pots or flats. Flats are small boxes 3 or 4 inches deep, 18 inches long and 12 inches wide. These vegetables are the cabbage, cauliflower, celery, egg plant, Kahlrabi, lettuce, onion, pepper, sweet potato, Petsal, or Chinese Cabbage, and Tomato. Beets are often started in this way.

CULTIVATION Cultivation should start soon after the crops are planted. Most soils form a crust when they dry out. This crust should be kept broken, especially before the plants come up. The land should be cultivated after every rain or at intervals of a week or ten days during dry season. By cultivation you make a better home for your plants, keep the weeds down and the more moisture is conserved. A wheel hoe is a good implement to have for use in the garden. Both time and labor are saved by using it. A rake or hoe can be used to a good advantage, and do not forget that the soil needs constant stirring if you intend to get the best results.

SUCCESSION CROPPING Succession cropping is the growing of more than one crop, one after another, on the same land during one season, such as peas, followed by beans, turnips, followed by fall spinash, Irish potatoes, followed by Sweet potatoes, etc. The reason why people do not have a garden the year around is because they do not plant vegetables where the one just matured was taken out. As in companion cropping, if the number of days it takes the different vegetables to mature are kept in mind; also the season the crop will produce the best vegetables, a crop can be kept on the soil the whole season. It is best to plant one-third of the seed of one vegetable like turnips, radishes, etc., and in a week or ten days plant another one-third and so on. When planted this way the whole crop does not mature at one time and you have the vegetable for table use over a longer period.

#### TIME OF PLANTING AND VARIETIES

#### CROPS OCCUPYING THE GROUND ALL SEASON

Asparagus	Cucumber	Pumpkins
. •	Cucumber	•
Rhubarb	Egg Plants	Potato, Irish
Beans, Pole Snap	Leeks	main crop
Beans, Pole Lima	Melons	Salsify
Beets, Late	Onions (from seed)	Squash
Carrots, Late	Parsnips	Rutabagas
Corn. Late	Peppers	Tomatoes

#### SUCCESSIVE

Beans, Dwarf	Peas, English	Spinash
Kohlrabi	Parsley	Turnips
Lettuce	Radish	

### EARLY CROPS WHICH MAY BE FOLLOWED BY OTHERS

Beets, Early	Cabbage, Early	Onion Sets
Carrots, Early	Corn, Early	Turnips

#### LATE CROPS WHICH MAY FOLLOW OTHERS

Beets, Late	Celery	Kale
Brussel Sprouts	Flat Turnips	Peas, Late
Cauliflower	Endive	Spinach
Cabbage, Late		

#### DISCLAIMER

We cannot grow your crops or control weather conditions, or prepare the soil for receiving the seeds, so we don't promise in any way that the seeds we ship you will absolutely produce a crop for you.

Seeds of the best quality often fail through improper treatment. A small seed may be so deeply sown that the young plant cannot reach the surface.

Most failures result from disregard of the conditions necessary to germination rather than from inferiority of the seeds used. These conditions are a proper temperature, sufficient moisture and free access of air into the soil. Besides these the soil must be in proper condition, well tilled, and present no physical obstacle to the growth of the young plant.

It would not be fair for us to undertake to insure the crop; therefore The American Seed Company give no warranty, expressed or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs or plants they send out, and they will not be in any way responsible for the crops. If the purchaser does not accept goods on these terms they are at once to be returned, and any money paid will be refunded.

### ILLUSTRATED AND DESCRIPTIVE CATALOG

= OF ====

### VEGETABLE SEEDS

WITH GENERAL DIRECTIONS FOR CULTIVATION

JERUSALEM OR GROUND ARTICHOKES A WONDERFUL HOG FOOD FOR THE SOUTH—Any Southern farmer who grows hogs and does not have some Jerusalem Artichokes to feed is neglecting one of the most important hog-food crops. It fattens hogs quickly, and it is said by many hog raisers that hogs fed on Jerusalem Artichokes have never been known to have cholera. Only a small quantity of seed is required to plant an acre. Three to four bushels per acre are sufficient. The tubers should be cut into small pieces, and not more than two of these should be put in a hill. The hills may be from two to four feet apart. Five hundred bushels have been yielded off an acre, and sometimes considerably more. Milk cows do well when fed on the roots and stalks. The crop is not a bit hard to eradicate. Plant during March and April.

See Roots on Page 41.

### ASPARAGUS

One of the earliest and most delicious of spring vegetables. We strongly urge all those having enough available space to put in a bed for their own use, following carefully the cultural directions given below. Beds are usually formed by setting roots which can be procured of us. If you wish to grow plants from the seed yourself pour warm water on

the seed and allow it to stand until cool; pour it off and repeat two or three times with fresh warm water. Sow in spring in drills about eighteen inches apart and two inches deep in light, rich soil, planting fifteen to twenty seeds to each foot of row. When the plants are well up thin to about one inch apart and give frequent and thorough cultivation during the summer. If this has been well done the plants will be fit to set the next spring. The permanent beds should be prepared by deep plowing or spading and thoroughly enriching the ground with stable manure or other fertilizer; a moist, sandy soil is best. If the subsoil is not naturally loose and friable it should be made so by thoroughly stirring with a subsoil plow or spade. Set the plants about four inches deep and one to two feet apart in rows four to six feet apart. After the plants are well started give frequent and thorough cultivation. Early the next spring spade in a heavy dressing of manure and about one quart of salt and double the quantity of fresh wood ashes to each square rod and cultivate well as long as the size of the plants will permit, or until they begin to die down. The next season the bed may be cut over two or three times, but if this is done all the shoots, no matter how small, should be cut. After the final cutting give a good dressing of manure, ashes and salt. Cultivate frequently until the plants meet in the rows. In autumn after the tops are fully ripe and yellow they should be cut and burned. A bed 15 by 50 feet, requiring about 100 plants, if well cultivated and manured. should give the following season an abundant supply for an ordinary family and continue productive for eight or ten years.

PALMETTO A very early maturing and prolific variety, producing an abundance of very large, deep green shoots.

CONOVER'S COLOSSAL This sort is one of the largest and most extensively used green varieties. Shoots bright green, sometimes tinted with purple at the top, very tender and of the best quality.

COLUMBIAN MAMMOTH WHITE Furnishes shoots of exceptionally large size and of superior tenderness and flavor. Color clear white until four to six inches above the surface. A large proportion of the seeds will produce white shoots and the green ones can be easily rejected when setting out the permanent bed.

We carry Asparagus Roots for above varieties. See price list.



Palmetto

Our stocks are grown for use by the most experienced growers in the world, who are situated where just the right sort of climatic conditions prevail to give us seeds full of vitality, of strong germinating power, and great blight resistant qualities. These growers exercise every possible care in the breeding up of our seed stocks, our fields are carefully rogued of all off-types, and consequently we know that the stocks we offer you are as near perfection as it has been possible so far to get them free from any blight.

#### GREEN PODDED BUSH BEANS

PLANTING AND GROWING DIRECTIONS The Bush varieties should be planted 1½ inches deep, in rows 18 inches or 2 feet apart, 2 inches apart in the row. When the plants are well up, thin gradually to 6 or 8 inches from each other, leaving the strong est plants as much as possible. Do not hoe them when wet from dew or rain as this induces rust of leaves or pods.

EXTRA EARLY BLACK VALENTINE Dwarf green-podded. The plant is extremely hardy and early, growing a vigorous, sturdy bush. The pods are borne profusely and are very large The color is a rich dark green, and the pod, while of excellent table qualities is sufficiently fine grained and firm as to make it a splendid and profitable sort to ship to distant markets.

BURPEE'S STRINGLESS GREEN POD A splendid variety—one that is very popular and will please you. The pods are long—are uniformly straight—rich, dark green and so meaty as to be really saddle backed. The pods are entirely stringless. Very tender and of delightful, sweet, milk flavor. A prolific, strong, vigorous grower. Continues to produce long after other bush varieties have gone.

EXTRA EARLY REFUGEE An extremely early green-poded sort. The pods are round, fleshy and light green. The plants are a little smaller than those of the Refugee. This is an excellent snap bean for early market and will stand shipment well.

EARLY YELLOW SIX WEEKS This name is confusing to some who do not know this bean. It is a green-podded bean and not a yellow-podded, as the name might indicate. The name, Yellow Six Weeks, comes from the color of the seed. The plants are very hardy, large and vigorous. The pods are long, about six inches, straight, flat and light green. When young, are considered good for snap beans. It is used extensively for the market, as well as for the home garden.

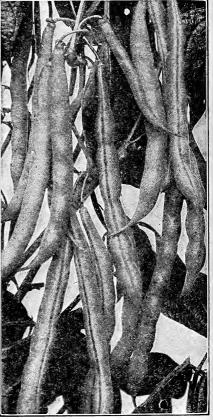
GIANT STRINGLESS GREEN POD Possesses many of the excellent characteristics of the Round Pod Valentine, which is one of its parents. It is a prolific bearer; the pods average onethird larger than those of the parent variety. They are absolutely stringless, unusually crisp, round and fleshy.

REFUGEE OR THOUSAND TO ONE Somewhat later than the other green-podded sorts, but very prolific, nearly round, pale green pods, which are quite fleshy, but have light strings. They are brittle and of good flavor.

THE IMPROVED LONGFELLOW A remarkably early and exceedingly prolific variety of beans. The plants are of robust, compact habit, bearing a profusion of round, straight, fleshy pods. The pods are remarkably tender and brittle, without a trace of tough interlining. They are stringless in all stages of growth, except when quite old. In cooking, they retain their delicate green color, making them very attractive when served.

EXTRA EARLY RED VALENTINE A decided improvement over the original Red Valentine, being 10 days earlier and a much heavier yielder. Unusually hardy, withstanding slight frosts that destroy other sorts, therefore, can be planted early. The pods are full-meated and of choice flavor.

EARLY MOHAWK Yields heavy and especially adapted to poor lands. Long, flat, straight pods. Very hardy.



Tennessee Green Pod

TENNESSEE GREEN POD The Earliest Bean of All. This early variety of snap

beans is very popular in the South. It is absolutely the earliest bean on the market. It will stand more cold weather than some varieties. A great favorite with the market gardeners, as it will stand long shipments and hold up very well indeed. The plants are large, somewhat spreading and prolific. The foliage is dark green with large crumpled leaves. The pods are very long; plant irregular in shape. Fruit is dark green and exceptionally fine flavored. Our strain of this variety is unexcelled.

BOUNTIFUL An Improved Long Tenon S...
that it is earlier, more prolific, very much larger and more tender. Pods are flat, absolutely stringless, rich green, very large and handsome. Desirable for both early and late planting. IF YOU DO NOT HAVE OUR LATEST PRICE LIST-WRITE US.

#### BEANS—GREEN PODDED BUSH BEANS—Continued

ROUND YELLOW SIX WEEKS  $\frac{\text{While this does not differ greatly from the Early Yellow Six Weeks in ap$ pearance of the plants, the pods are shorter and much thicker, fleshier, and mature earlier, the plants are usually shorter and more compact. The pods are about 41/2 inches long, attractive light green, and are desirable for early snaps for home garden and markets; seed medium size, round, yellow, with darker markings about the eye.

#### BUSH LIMA BEANS



Burpee's Bush Lima

These should be planted and cultivated the same as green podded bushbeans, except should be planted later.

All the seed we have has been tested, and shows a high vitality.

#### TEXAS SPECKLED LIMA

This excellent variety is a native of Texas. and is, therefore, splendidly adapted to hot, dry climate. The pods are slightly curved and of medium length. The green beans are of medium size, beautifully speckled or blotched dark red. This is one of the earliest varieties, is exceedingly prolific, bearing abundantly, commencing in early summer and continuing until killed by frost.

BURPEE'S IMPROVED BUSH LIMA The stout, erect bushes grow 18 to 20 inches high, 2 to 3 feet in diameter. They are laden with large, handsome pods of excellent flavor. They are shelled very easily.

HENDERSON'S BUSH LIMA Particularly adapted for the South. Compact bush: produces large crops until frost.

DREER'S BUSH LIMA Somewhat later than Burpee's Bush Lima, but very prolific. The pods contain three to four plump beans which, if picked at the right time, are of excellent flavor. They are shelled very easily.

FORDHOOK BUSH LIMA BEANS Fordhook Bush Lima furnishes beans for the table three weeks earlier than they can be had from most pole varieties.

Bonny Ozark Stringless

THE BONNY OZARK STRINGLESS BEST GREEN PODDED BEAN EVER OFFERED

A bunch of Dwarf Green-Podded variety, combining the good qualities of Red Valentine, Burpee's, Yellow Six Weeks and Bountiful, and we do not hesitate to pronounce this bean the peer of any green podded dwarf bean you have ever grown. It has a flavor distinct and pleasant.

A week earlier than Valentine, absolutely without strings; 40 to 50 pod grower. Excels any bunch of dwarf green pod bean in cultivation. A record of 300 bushels of pods from one acre. Finer grained and thinner skinned than Burpee's-larger than any other variety in its class; tender, brittle and perfect snap bean in every respect. Sow them when the apple trees are in bloom.

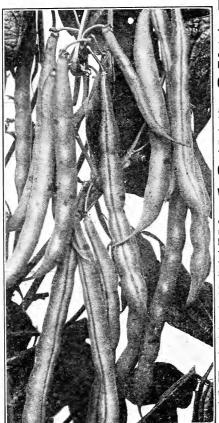
IF YOU DO NOT HAVE OUR LATEST PRICE LIST-WRITE US.

#### SNAP WAX PODDED BUSH BEANS

Planting and growing directions are the same as given under "Green Podded Bush Beans."

PROLIFIC GERMAN WAX

This improved strain of Black Wax is exceptionally productive, very hardy, reliable and market. The plants are medium sized, erect in growth, with small foliage, very vigorous, early intermediate in season with longer bearing period than most sorts. The pods are of medium length, four and one-fourth to four and one-half inches, borne well up from the ground, curved, cylindrical and fleshy. They are of a clear, light golden yellow color and remain a long time in condition for use as snaps. Seed small, oblong, jet black.



PENCIL POD WAX This very handsome black wax sort is medium early, fairly hardy and productive. It is one of the very best sorts for home use and for near markets where highest quality is desired. The plants are strong growing with roughened leaves. The pods are long, five and one-half to six inches, straight, round, fleshy and of a bright yellow color. They are tender, absolutely stringless and are produced through a long season. Seed long, round, medium sized, solid black.

CURRIE'S RUST-PROOF WAX It has been claimed that this variety, usually midseason but sometimes earlier maturing, is absolutely rust proof and we have found it as nearly rust proof as any wax podded bean. The plants are very vigorous, hardy and productive. The pods are light yellow, similar in shape to Golden Wax but longer, about five and one-half to six inches in length. Seed long, oval, rounded at ends, medium sized, purplish black. This is a well known market gardening and truckers' sort in some sections.

CHALLENGE BLACK WAX Extra early. Round pods; flavor excellent. Not apt to rust.

WARDWELL'S KIDNEY WAX than Golden Wax, yields a large crop of long, nearly straight, broad, light golden yellow, handsome pods. These are of large size, about six inches long, and are of good quality. They always command a ready sale, making the variety one of the most profitable for the market gardener as well as shipper. This is also very extensively used for snaps for the home garden. The plants are strong growing and bear their long pods well up from the ground. The leaves are large, broad and slightly roughened. Seed large, flattened, kidney shaped, white with dark markings about the eye

DAVIS WAX This is also called Davis White Kidney Wax. It is a well known market sort, much used for shipping. The plants are very hardy and productive and the variety is very desirable where a handsome wax-podded, white seeded intermediate sort is wanted. The plants are very vigorous. The pods are remarkably long, about six inches, sometimes longer. They are handsome, light yellow, straight, very attractive and when young are crisp and tender. The dry beans are excellent for baking. Seed medium large, kidney shaped, clear white.

IMPROVED GOLDEN WAX Extensively grown in the South for the reason that it stands drought remarkably well. In addition, it i srust-proof. The pods are of medium length—golden yellow— very fleshy and wax-like.

### **POLE LIMAS**

Of all the pole beans, limas are considered to have the greatest economic value. The culture is the same as for other pole beans except that being more tender, the seed is usually planted one to two weeks later. In firm soils it will be found of advantage to place the beans on edge with the eye down as when planted in this manner they germinate and come up more readily.

MAULES NOXALL OR MISSOURI WONDER cropper, giving large crops when others are an entire failure. The green pods are long, round and tender; excellent for planting among corn, good for either snap or shelled beans.

DREER'S IMPROVED POLE LIMA Also called Potato shape, being thick and plump rather than flat and oval. It is a very "meaty" bean, of excellent flavor and high table quality. The beans are delicious. They remain green in the pod a long time after maturing. The pods, which are borne in clusters, average four or five inches in length, and each pod contains four or five thick beans, easily shelled. Continues bearing until very late in season.

LARGE WHITE LIMA OR BUTTER BEANS The old favorite

SMALL WHITE LIMA, CAROLINA OR SIEVA  $^{\text{T}}_{\text{v}}$  e  $^{\text{H}}$  i s

early and reliable small seeded pole lima is especially adapted for planting in the South. The vines are vigorous, with many short branches. The leaves are small, smooth, stiff, glossy dark green. The pods are dark green, short, about three inches, curved, flat. Seed small, flat, white with slight tinge of yellow. This is sometimes called Sewee. It is the most generally known "butter bean" of the South.

#### BEANS—POLE OR RUNNING

Although pole beans require considerable care and labor, they are when properly grown usually of longer bearing period than the dwarf sorts and are generally more productive.

Pole beans are even more sensitive to cold and wet, as well as to drought and hot winds, than the dwarf varities, but are of superior quality and productiveness. After settled warm weather, set poles four to eight feet long in rows four feet apart and extending north and south, the poles being three feet apart in the row. Let the poles slant slightly toward the north. Set in this way the vines climb better, and the poles are straighter and more easily seen. Around each stake plant five to eight beans one and one-half to two inches deep. When well started thin to four plants, and see that they all climb around the pole in the same way, for they will not grow if tied up in the opposite direction.

Another plan is to plant in rows thickly enough so that there will be one plant to eight or ten inches. Set posts five feet high firmly at each end of the rows and drive stakes made of two by two lumber at intervals of about

sixteen feet long the rows. Stretch a wire, size number 10 or 12, between the posts along each row, and fasten it to the tops of the stakes with wire staples. Run a lighter wire or twine along the bottom about six inches from the ground and fasten to the posts and stakes with wire staples. Between these two stretch a wire or twine wherever there is a plant. The vines will run up these until they reach the top wire, when they will care for themselves. Another way is to omit the bottom wire and stick small stakes two to six inches in the soil and fasten to top wire.

WHITE CREASEBACK This green podded, white seeded creaseback variety is valuable for its extreme earliness and its habit of perfecting all of its pods within a short time. The vines are medium sized, vigorous and in good soil wonderfully productive, bearing round, fleshy pods in clusters of from four to twelve. The pods are of medium length, usually about five inches, comparatively straight and of attractive light green color. They are of the best quality as snaps for home use and stand shipping better than most sorts. Seed small, oval, white. The beans are too small to be of much value when shelled green, but are considered by many to be of very superior quality for baking.

KENTUCKY WONDER Also known as Old Homestead. We believe this variety is the most practically useful of the green podded pole beans suitable for use as snaps. It is an early, very prolific sort, with showy pods which are of most excellent quality. The vines are vigorous, climbing well and very productive, bearing pods in large clusters. The pods are medium light green, very long, often reaching nine or ten inches, curved and twisted, nearly round and very crisp when young, becoming very irregular and spongy as the beans ripen. Seed long, oval, slightly flattened, dun colored. One of the very best early pole snap beans for the home garden or market. The quality of our stock is unsurpassed.

ST. LOUIS PERFECTION WHITE An early maturing, green podded, white seeded pole sort desirable for snaps and unsurpassed in its class as green shell beans. The vines are vigorous and very productive. The pods are round, very long, often eight to nine inches, irregular in shape and quite stringless. The beans when shelled green are large, very tender and white, a very desirable feature when comparison is made with the colored beans of other varieties of this class. Seed medium long, oval or well rounded, solid white.

RED SPECKLED CUT SHORT OR CORN HILL This extensively cultivated, green podded climbing sort, with red speckled, oval seed, is used largely in the South for planting among corn. It will give a good crop without the use of poles. The vines are medium sized, but vigorous, twining loosely with dark colored leaves. The snap pods are short, three to three and one-half inches, straight, flat to oval, fleshy and of good quality. The pods as they mature become light yellow tinged with red, the beans showing distinctly through the pod. Seed nearly oblong, cut off diagonally at the ends, light grayish white, covered about the eye and at one end with reddish or purplish brown, and irregularly dusted over most of the surface.

SCOTIA OR STRIPED CREASEBACK
A hardy and very productive green podded cornfield bean. The vines are sturdy and of good climbing habit, with small medium, deep green leaves. The pods are long, about six inches, very cylindrical or completely rounded, distinctly creasebacked, very fleshy and of excellent quality. The color when in condition for use as snaps is light silvery green, becoming tinged with purple as the pods mature. Seed small-medium, kidney shaped, mottled putty color with dark striping. This is especially suitable for growing on corn for snaps.



#### **BEANS—POLE OR RUNNING—Continued**

LAZY WIFE One of the best of the later green podded pole beans for snaps or green shell use. The medium green pods, borne in large clusters, are five and one-half to six and one-half inches long, broad, thick, fleshy and entirely stringless. When young they have a rich, buttery flavor which is retained until they are nearly ripe. The dry beans are excellent for winter use. The seed is white, medium size, slightly oval or nearly round.

DUTCH CASE KNIFE This is also used as a corn-hill bean. Pods long and flat; beans flat, kidney shaped, while of excellent quality, green or dry.

LONDON HORTICULTURAL OR SPECKLED CRAN-

BERRY One of the best of the Horticultural varieties as a general purpose late green shell bean for home or market. The vines are moderately vigorous with large, light colored leaves. The pods are medium length, four and one-half to five and one-half inches, pale green when young, becoming as they mature yellowish green striped or splashed with red. The beans are large, ovate, flesh colored, splashed and spotted with wine-red and of the highest quality, either green or dry. Many like this sort better than limas. This well known horticultural pole bean is sold also as Wren's Egg.

### BEETS

The best results are obtained on a deep, rich, sandy loam. If wanted very early, sow such sorts as Crosby's Egyptian and Detroit Dark Red in hotbeds and transplant, cutting off the outer leaves. For general crop sow in freshly prepared soil as soon as the ground will permit, in rows eighteen inches apart covering about an inch deep and pressing the soil firmly over the seed. When the plants are well established thin four to six inches apart in the row.

For winter use the turnip varieties may be sown in June or July so as to mature late in the season. The roots are stored in a cellar and covered with sand to prevent wilting, or they may be kept outdoors in pits such as are used for apples and potatoes.

EXTRA EARLY EGYPTIAN BLOOD TURNIP This is the best variety for force ing. It is also excellent for first early crop outdoors, being very early, with small tops. The leaves are dark green, shaded and veined with dark red. The roots are very dark red, moderately thick, a little rounded on top, distinctly flat on the bottom, and about two inches in diameter when mature. The flesh is dark purplish red, zoned lighter shade; firm, crisp and tender.

CROSBY'S EGYPTIAN This very desirable table beet does not closely resemble the original Egyptian except in its extreme earliness. The tops are small. The roots are flattened globe shaped and very smooth. The exterior color of the root is bright red. The flesh of our strain is bright vermilionred, zoned with a lighter shade, very sweet, tender and of excellent quality. This is one of the best for early planting outdoors and is much used for bunching. It becomes fit for use earlier than any other variety but it is not so well suited as Extra Early Egyptian Blood Turnip for forcing in hotbeds or for transplanting. Our stock is exceptionally uniform in shape and color, and is earlier than the older strains which are similar in shape but show the purplish red color.

DETROIT DARK RED We believe this is the best beet for the market and home THE MOST DANK RED garden, and on account of its uniformly deep rich color the most desirable for canning. The tops are small and upright in growth. The

leaves are dark green, shaded with red. The roots are medium sized, globular or Extra Early Egyptian Blood Turnip nearly round, very smooth and of dark blood red color. The flesh is deep vermilion-

red, zoned with a lighter shade of the same color. The variety is very desirable for bunching. Careful comparisons with all prominent varieties on the market prove that Detroit Dark Red is the most uniform in shape and size and the most attractive in color. It is unsurpassed in

EARLY ECLIPSE An early beet especially desirable for the home garden and used for bunching. The tops are small. The roots are bright deep red, smooth, round or slightly top shaped, with a small tap and small collar. The flesh is bright red, zoned with pinkish white, very sweet, crisp and tender, especially when young.

EDMAND'S EARLY BLOOD TURNIP A desirable second early market beet, suitable also for the home garden. Tops short, rather spreading; ribs and leaf stalks dark red; blade of leaf bright green, often with wavy edge. Roots nearly round or slightly flattened; exterior color dark red, interior color purplish red with little zoning; crisp, tender, sweet and an excellent keeper.

CRIMSON GLOBE The roots are almost globe-shaped and free from rootlets, leaving the skin entirely smooth. The flesh is of the finest quality, a rich blood-red, slightly zoned and always sweet and tender. Unequalled for table use or market.

#### **BEET**—Continued

DEWING'S BLOOD TURNIP

This medium early table sort is tender, sweet and a good keeper. Tops medium sized; leaf stems and veins dark red; leaves green. Roots dark purplish-red, turnip shaped with medium sized tap. Flesh carmine with purplish tinge, zoned with lighter shade.

SWISS CHARD (Sea Kale Beet) This kind of beet is grown exclusively for the numerous, fleshy, tender leaves and leaf stalks, which are superior to those of other beets for use as greens. Later in the season the wax-like leaf stems are cooked like asparagus or are pickled. This variety we offer has large, broad, undulated leaves of attractive yellowish green color, and very large, broad white stalks and midribs or chards. It is well worthy of a place in the home garden as well as for market use. Swiss Chard is sometimes called Leaf Beet, Spinach Beet and Silver Beet.

EARLY TURNIP BASSANO This second early variety when young is very sweet and tender. It is excellent for the table, being especially adapted for use as greens. The tops are large. The roots attain a large size, are light red in color and flattened turnip-shaped with rather heavy tap. The flesh is pink, zoned with creamy white.

EARLY BLOOD TURNIP (Improved) An extra selected stock of Blood Turnip, having larger, coarser tops and root than Detroit Rark Red and requiring a longer time to mature. The roots are dark red and nearly round or slightly flattened. The flesh is deep red, zoned with lighter shade, sweet, crisp and tender. This is an excellent market and home garden sort for summer and autumn use.

HALF LONG BLOOD A half long, deep red beet, by far the best variety for winter and spring use. It is excellent to slice for pickles. The tops are very upright with exceptionally smooth leaves. The roots are deep red, half long, smooth and uniform in shape. The flesh is very deep, rich red, sweet and tender.

LONG DARK BLOOD A standard long late variety of very good quality which keeps well through the winter. The roots are smooth, rather slender, growing largely under ground, with few or no side roots and when mature about eight or ten inches in length, sometimes longer when grown in deep, well-dug and well-manured soil. The exterior color of the roots is very dark purple, almost black. Flesh is dark red, tender and sweet. It is an excellent sort for pickles.

### CABBAGE

CABBAGE CULTURE

For home gardens the seed for early cabbage can be sown in boxes very early, kept in sheltered spots and covered when there is danger of freezes. Later plantings may be made in open ground as early as ground can be worked. Work soil in seed beds as fine as possible. Beds should be slightly raised for drainage. Do not fertilize soil in seed beds to make it any richer than the open ground in which the crop is to be grown.

Sow seed in drills 6 inches apart across the bed, dropping the seed 5 or 6 to the inch. Thicker sowing than this means spindling, unhealthy plants. Cover seed about  $\frac{1}{4}$  inch in heavy soils,  $\frac{1}{2}$  inch in light, sandy soils; firm the soil after covering and then water the bed thoroughly. Keep beds moist, but not soaking wet. Seed germinates in three to eight days, according to weather. The young plants should be kept growing steadily from the start. A check in the growth of cabbage is injurious. When plants have made the fourth or fifth pair of leaves transplant to open ground.

Cabbage can be grown on almost any soil from light sandy to heavy clay or muck. Naturally the light soils will require more fertilizer or manure than the heavier ones. Most of the fertilizer or manure should be worked into the soil before transplanting. The best all-around commercial fertilizer for cabbage should contain: Available phosphoric acid 7 per cent, potash 8 per cent, nitrogen 5 per cent.

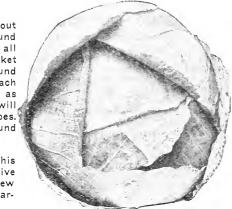
Most of the cultivation should be before the crop is planted. This means two or three deep plowings and then work the soil as fine as possible. You won't overfeed cabbage, so you need not be afraid of putting too much manure or fertilizer on the crop.

### FIRST EARLY SORTS

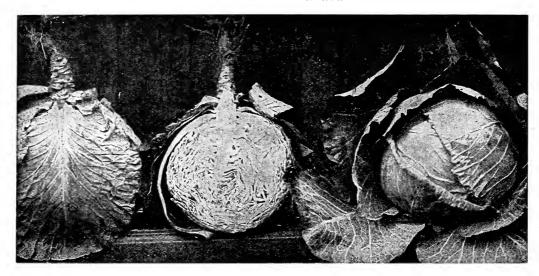
COPENHAGEN MARKET CABBAGE

This variety is undoubtedly without a rival and the finest large Round Headed Early Cabbage in cultivation. The type is so thoroughly fixed that all of the heads mature at the same time, which is a great benefit to the market gardeners, entailing less labor in harvesting the crop and allows the ground to be cleaned at the first cutting. The heads average about ten pounds each in weight, are very solid, with small core, and of fine quality. It matures as early as Charleston Wakefield and most of the pointed head varieties, and will give a much heavier yield per acre than any variety of the pointed head types. The plants are short stemmed, the heads being produced almost on the ground level.

EARLY JERSEY WAKEFIELD By far the most generally grown of this class, being of delicate flavor and attractive appearance. The heads grow to a blunt point, are heavy and solid, with few outside leaves. One of the most popular sorts with market growers, as it carries well in shipping.



#### CABBAGE—Continued



CHARLESTON WAKEFIELD Ripens a few days later than the Early Jersey Wakefield, but is much larger. Of true "Wakefield" type, it possesses all the good characteristics of the Jersey Wakefield in an intensified degree.

EARLY SPRING An exceptionally early flat head cabbage of the finest quality.

#### SECOND EARLY AND INTERMEDIATE SORTS

EARLY DWARF FLAT DUTCH The plants of this valuable second early sort are short stemmed, compact and upright, with comparatively few and short leaves. The outer leaves are slightly waxed and serrated at the edges. The heads are large for size of plant, are nearly round or somewhat flattened, close, firm and very solid. They mature a little earlier than Early Summer. This variety is extensively used for the home garden and market. The seed we offer is of first quality.

HENDERSON'S EARLY SUMMER An excellent, second early, somewhat flattened cabbage, valuable for the home garden, and takes well on the market. It is also well adapted for kraut. The plants are vigorous and strong growing, but compact, with numerous but not large, rather spreading outer leaves, which are somewhat frilled and are sometimes called rather thin and slightly undulating. The stem is rather short. The heads are of medium size, round, somewhat flattened and keep longer without bursting than most early sorts.

GLORY OF ENKHUIZEN This second early variety is very sure heading and of excellent quality. The plants are of vigorous growth, with large, rather spreading outer leaves, which are noticeably curved and frilled. The heads are globular or very nearly round, very solid and of large size for so early a variety.

FOTTLER'S EARLY DRUMHEAD OR BRUNSWICK

SHORT STEM This very short stemmed flat cabbage is one of the very best and most extensively used second early or intermediate sorts. It is especially adapted for the home garden. The plants are of dwarf and compact but strong growth, with rather few outer leaves, which are fairly smooth or slightly waved. The heads are large for size of plant, distinctly flat, solid and of excellent quality. This sort is also suitable for later use.

SUCCESSION A sure heading sort, intermediate or second early in season and adapted for autumn as well as late summer use. The plants are vigorous and strong growing, with a short stem and have numerous, rather short, outer leaves which are somewhat frilled. The heads are large, deep, very firm and of excellent quality. The seed we offer is from carefully grown selected stock.

ALL SEASON A very desirable large cabbage of intermediate season, adapted for autumn as well as late summer use, and considered one of the most desirable for kraut. The plants are very vigorous and sure heading, with few outer leaves which are large and fairly smooth or slightly waved. The heads are nearly round or somewhat flattened, very solid and of excellent quality. It is remarkable for its ability to stand the hot sun and dry weather, remaining an exceptionally long time in condition for use. Sometimes sold as Vandergaw.

EARLY YORK Head small, heart-shaped, firm and tender.

EARLY DRUMHEAD Standard variety of well known merit. Very similar to Henderson's Early Summer.

IF YOU DO NOT HAVE OUR LATEST PRICE LIST-WRITE US.

#### CABBAGE—Continued

ALL HEAD EARLY This excellent second early market sort produces heads that are very large for so early a cabbage and of very good quality. It is desirable not only for general spring planting, but by planting it late can be used as a fall and early winter cabbage. The variety is well adapted for kraut. The plants are compact, with few outer leaves, which are comparatively smooth and rather thick, being nearly entire at edges and only slightly waved. The stem is short. The heads are solid and flat, but very deep. Our strain is of special value.

EARLY WINNINGSTADT

One of the best of the second early or medium early sorts, very hardy, with a very hard sharply pointed head and a very sure cropper. Owing to the compact and upright habit of growth and peculiar texture of its rather short and thick, dark green leaves the variety resists cold, wet and insect pests exceptionally well. The heads are of medium size, very closely and convolutely wrapped, sharply conical, of good quality and keep very well. The leaves are dark bluish green with much bloom. The variety is very extensively used for the home garden. It is sometimes planted late and then makes a desirable winter cabbage.

### LATE OR AUTUMN AND WINTER SORTS

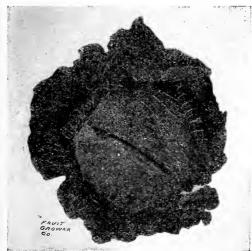
VOLGA A main crop sort, very desirable where large, uniformly round heads with short stem and plants of compact growth are wanted. This sort matures very early for a variety furnishing such large heads of excellent shape. The outer leaves are thick, long, oval and rather smooth. The variety is hardy, usually very solid and a good keeper.

SUREHEAD One of the most reliable main crop or late cabbages for northern latitudes, being very hardy and exceptionally sure heading. In some sections this is used largely as a late home market cabbage and for shipping. The plants are rather upright, with many outer leaves, which are waved, thin edged, crimped and distinctly frilled; stem rather short. The heads are large and broad, thick, somewhat flattened, compact, very solid and of excellent quality.

PREMIUM LATE FLAT DUTCH The plants are very hardy, comparatively slow growing but very sure heading; stem rather short. The plants are exceptionally vigorous, with very large, broad, spreading outer leaves which are moderately smooth or very slightly waved and slightly blistered. The heads are uniformly large, often very large, flat but deep, distinctly flattened on the top, solid and of excellent quality. This is considered by many as the standard, very large late cabbage for home garden and market. It is an excellent keeper.



Hollander or Danish Ball Head



Premium Late Drumhead

PREMIUM LATE DRUMHEAD We recommend this sort for markets that require a very large and deep head. It is also much used as a main crop or late sort for the home garden. The plants are large, fairly compact, but distinctly vigorous, with medium length stem and large outer leaves, which are upright in growth and moderately waved. The heads are uniformly large, very large when grown in good, rich soil, are flattened on top, but very deep, compact and of excellent quality. The heads can be kept in good condition until late in spring.

ST. LOUIS LATE MARKET This is a very late cabbage, of strong growth and good size.

MAMMOTH RED ROCK The best variety of late red cabbage. Its sure heading, large size, solid as a rock and will please all who want the best red cabbage.

DRUMHEAD SAVOY

The best of the main crop and late Savoys for home use or market. The plants are vigorous, of medium size, with rather short stem, and are very sure heading. The outer leaves are medium large, thick, fleshy and densely and uniformly crumpled. The heads are large, nearly round, fairly solid, sweet and tender.

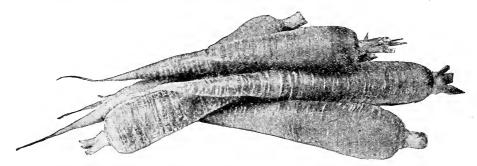
HOLLANDER OR DANISH BALL HEAD sure heading, very solid, of good quality, and as one of the very best keepers this is particularly desirable for distant markets or for late spring use. The plants are vigorous and compact, with stem of medium length. They are exceedingly

hardy in resisting cold and stand dry weather well. The leaves are distinctly upright in growth, few but rather large, long and narrow, thick, smooth, bluish green, covered with whitish bloom. The heads are medium sized, round, exceptionally solid and stand shipment better than any other late sort.

### CARROTS

CULTURE Carrots do best in well enriched and manured sandy loam, though they will do well in any good land that is deep and thoroughly worked. For early crop, sow seed during the early part of April; for late crop, in July and August. As the seed are very slow in germinating, it will be found helpful to soak the seed for twelve hours previously to planting, in warm water, and to roll the land after planting, to prevent evaporation of moisture. Plant in rows 12 to 15 inches apart, thinning later to about 4 inches apart in the rows. Care should be taken to have the land clean, as the seedlings are very delicate, and should not be run over with weeds. Keep well cultivated.

1 oz. seed is sufficient for 100 feet drill, 3 to 4 lbs. for an acre.



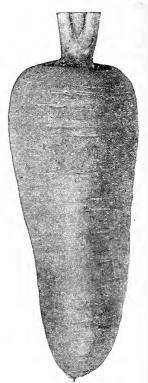
If You Do Not Have Our **Latest Price** List—Write Us

OXHEART OR GUERANDE A GOOD CROPPER AND AN EXCELLENT KEEPER. This carrot is a splendid sort. In length it comes between Early Scarlet Horn and Half Long Scarlet. It runs fully 3 to 4 inches in diameter, and specimens have been raised measuring over 7 inches in diameter. In quality it is extra good, and will prove satisfactory for home use and profitable for market. An early, handsome carrot.

DANVERS HALF LONG THE POPULAR CARROT FOR THE HOME GARDEN OR MARKET. This variety is well adapted to all soils and sections, and some years it leads our whole list as the best seller. It is half long in shape, almost cylindrical, somewhat stump rooted, and of rich, dark orange color. We claim that it will yield greater bulk and weight for a given length of root than any other carrot now grown. Over 40 tons per acre of Danvers have been grown, and a yield of twentyfive to thirty tons per acre is not uncommon. Grown extensively by market gardeners for bunching and makes a handsome appearance on the market stalls; of the finest quality and one of the most popular sorts for home use.

IMPROVED LONG ORANGE Improved Long Orange is the strongest and purest strain of that well known carrot on the market. The roots are of large size, and are smooth, fine grained and in all respects superior. Except in soil treated to raw stable manure, which makes all root crops rough, this carrot is always well formed. The color is deep orange, as indicated by the name. Enormous crops can be grown under good culture, particularly in a deep, light soil.

LARGE WHITE BELGIAN CARROT FOR STOCK FEED ONLY. The value of root crops for stock is just beginning to be appreciated. One of the most valuable is the Belgian Carrot, an immense cropper, having produced as high as 20 tons of roots per acre. In the Central South they are easily kept for feed all through the winter, while in the Lower South they can be left in the ground all winter and pulled as needed. The use of carrots in connection with dry feed helps keep the animals in good condition, and in milk or dairy cattle the flow of milk is largely increased. One thing must be remembered when large crops are wanted, and that is that the crop must be fed with manure or commercial fertilizers in proportion. Sow in drills 3 feet apart, using 4 pounds of seed per acre. When well up thin out the plants to 6 inches apart. They should be grown



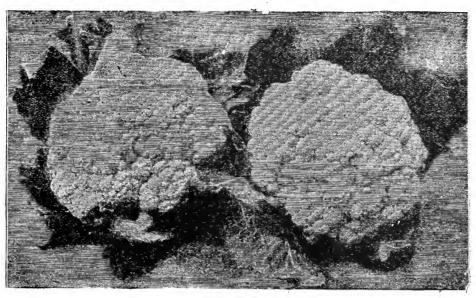
Danver's Half Long on land that has been previously cultivated and worked deeply. Give thorough cultivation throughout the season.

### CAULIFLOWER

Cauliflower, although one of the most delicious vegetables, is but little grown except by professional gardeners because of the erroneous notion that it is so difficult to grow that only skilled gardeners can product it. Anyone will be reasonably sure of success with this most desirable vegetable if the cultural directions given below are care-

fully followed.

For spring and early summer crop, sow in March or early in April in hot-bed. If soil is not too wet, seed should be thoroughly pressed into the ground after sowing. This insures quick germination. Cover seed with one-half inch of fine soil firmly pressed down. Transplant to cold-frame when sufficiently large to handle. As soon as danger of hard freezing is over set in the open ground in rows two and one-half to three feet apart and eighteen inches apart in the row. The plants will endure a light frost. The soil for cauliflower should be like that for cabbage, but it is better if made richer than is ordinarily used for that crop. Plenty of good manure must be well incorporated with the soil and the latter be brought into the highest state of tilth. No application, however, can be more necessary or more useful than that of cultivator and hoe.



For late crop, sow at same time as for late cabbage and treat in the same manner. It should be borne in mind that cauliflower will not head up well in hot, dry weather and hence the sowings need to be so timed as to bring the heads to maturity either before the hot summer weather sets in or not until the cooler weather of the fall. If it receive at this time a liberal supply of water, the size and quality of the heads will be greatly improved. After the head begins to form, draw the leaves over and tie them together to protect it from the sun and to keep it white. The heads should be cut for use while the "curd" is compact and hard, as they soon become much impaired in quality and appearance after they open and separate into branches.

EARLY SNOWBALL Unquestionably the earliest maturing strain of the true short leaved Snowball type of cauliflower. It is admirably adapted for forcing or wintering over for early crop and is the most popular sort for these purposes, also one of the best sorts for late summer and fall crop. Early Snowball is, moreover, a most desirable sort for the some garden. The plants are compact, with few short, outside leaves and are well suited for close planting. The heads are of medium to large size, solid, compact, round, very white and curd-like and are developed earlier than those of any other sort.

EXTRA EARLY DWARF ERFURT A remarkably sure heading early cauliflower. It is of dwarf habit with short outside leaves and is similar in most respects to Early Snowball, and nearly as early. The heads when ready for market are of medium to large size. The curd is white, exceptionally deep and of finest quality. It will give excellent results either in the home garden or for market use and is superior to most seed sold at higher prices. Where extreme earliness is not the greatest consideration we recommend this strain.

### IMPORTANCE OF GOOD SEED

The planter does not see his results until he has bestowed weeks and weeks of labor and care upon his plants and he does not want to be disappointed at that time. Realizing this, we select only the very best strains that are best adapted to growing in the sections in which we ship. Our seeds are grown by the most careful growers and will certainly prove satisfactory to the most critical planter.

### **BRUSSELS SPROUTS**

A very highly esteemed member of the cabbage family, especially desirable for the late summer and fall planting in Florida and the Gulf Coast section. The "sprouts" are miniature cabbages growing closely on the stalk of the plant, a small head being formed at each leaf joint. Plants are quite hardy and live through the winter in all parts of the Lower South. Quality and flavor are much improved by frost. Sow seed in July, August or September and when plants are four to six inches high transplant to open ground, like cabbage.

IMPROVED DWARF BRUSSELS SPROUTS The most desirable variety, producing compact "sprouts" of the very best quality.

### BROCCOLI

A vegetable very closely related to cauliflower, from which it is supposed to have come. In culture it is the same as that for cauliflower. There are many kept from growing cauliflower by the high price of the seed. To those we recommend Broccoli.

WHITE CAPE BROCCOLI The Cape Broccoli is the best type and you will do well to have it in your garden this year.

### **CORN SALAD**

CORN SALAD OR FETTICUS

LARGE GREEN CABBAGING. For spring salad or garnishing. Doesn't do well in hot weather so plant early as possible in spring. Ounce plants thirty feet of row.

### **CRESS**

EXTRA CURLED OR IMPROVED PEPPER GRASS

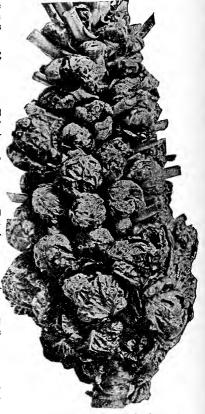
This tastes the same as Water Cress and is eas-

ily grown in spring, summer and fall. Make frequent plantings as the plant soon runs to seed.

WATER CRESS. Hardy plant grown easily in shallow fresh water. Start seed in very moist earth and transplant to water. Grown for the refreshing leaves which make fine salads and garnishings.

### **ENDIVE**

EARLY GREEN CURLED. Drill shallowly in early spring and thin out or transplant in good soil. When nearly grown tie up or shade heads when dry for blanching. Finest and most wholesome for salads and of excellent flavor. Standard and most popular variety.



Improved Dwarf Brussels Sprouts

### FACTS ABOUT VEGETABLE PLANTS

All the plants we send out are grown slowly in open beds, and are therefore much tougher, and will stand more cold than the tender plants that are grown in hot houses.

Cabbage plants ready January 1st and throughout the entire season.

All other plants in their proper season.

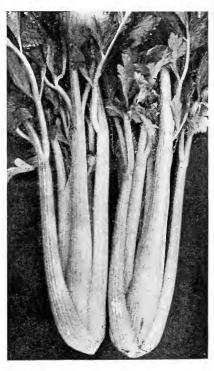
### CELERY

Celery seed is very slow in germinating and should therefore be sown in finely prepared rich soil, which can be kept moist. For early use, it is advisable to sow in hot-beds or in shallow boxes in the house or early in April in the open ground. Pack the soil well over the seed with the foot or with back of the spade.

Careful weeding by hand will have to be done until the young plants get started. Seed sown in beds should be transplanted. When the plants are set in the open field, trim the tops off and put in rows about 5 feet apart, setting plants 6 to 8 inches apart. Cultivate constantly during the growing season, and as the crop matures it must be earthed up or blanched. Sometimes this is done by placing two boards upright, close to the plants and filling in dirt both on the sides and in between the plants. The stalks are handled by hand, but the soil must not be allowed to get in the center. Sometimes, celery is set in beds about 4 feet wide, 6 inches between plants and 12 inches between rows, the earth being thrown out on each side of the bed. Then as it grows it is earthed in for blanching. A new method of growing celery, which is sometimes used, is to plant a plot completely over, setting plants about 6 inches apart. This enormous growth shades the young stalks so that they turn white, but it requires exceeding rich, heavily manured soil, deep and well drained and plenty of water for irrigation. An ounce sown in about 100 feet produces 5 to 8.000 plants. Four to 6 oz. produce plants enough to set an acre, which mature in 120 to 150 days, according to the kind and location.

GOLDEN SELF-BLANCHING
The best celery in cultivation and the most profitable for market and family use. The handsome appearance and straight, strong stalks of this celery are well brought out in the illustration. The heart is large, solid, golden yellow in color, and of delicious flavor. It will turn at maturity to a yellowish-white without banking, but like all other celeries, is improved by having some soil brought up to the stalks.

PERFECTED WHITE PLUME is the finest strain of White Plume Celery ever grown. Not only does the stem whiten, but the leaf itself, especially every inner leaf, assumes the attractive white color. This makes the White Plume Celery one of the most showy ornaments that can be put upon the Thanksgiving or Christmas dinner table. White Plume is usually planted for early use, and for this reason should have extra good care. Well-grown White Plume is simply perfect, both in palatability and beauty, and is the earliest celery in cultivation.



Golden Self-Blanching

### COLLARDS

An old-time stand-by for winter greens all over the South. Well adapted to every southern state and is a species of cabbage not only hardy, but a vigorous and continuous grower, producing a mass of leaves and sometimes a loose head. Not in its best condition until touched by frost. Seed can be sown here from early spring up to August 1st. When plants are 6 inches high transplant to open ground, setting 2 feet apart in the row. Cultivate like cabbage. Sow one ounce of seed to 200 feet of row.

SOUTHERN OR GEORGIA COLLARD This variety is the old-time

favorite. Stands all sorts of adverse conditions without injury and will make a good crop where the soil is too poor to grow cabbage, and it makes an excellent substitute for that vegetable. Is very hardy, stands winter without serious injury in the extreme southern states.

American Seed Co., Ft. Worth, Texas.

MT. VERNON, TEXAS

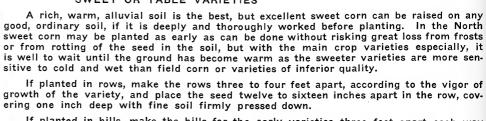
Gentlemen: I desire to say that I sold 165 pounds of your Tom Watson Watermelon Seed here this past season and they have given most excellent satisfaction; not a single complaint. Please book me for 300 pounds for next season.

Yours truly,

M. ZERCHER.

### CORN

SWEET OR TABLE VARIETIES



If planted in hills, make the hills for the early varieties three feet apart each way and plant four to six kernels to the hill. For the later sorts the hills should be three and one-half to four feet apart each way. Hoe frequently and when six inches high thin so as to leave three or four plants in the hill. Give frequent and thorough but shallow cultivation until the tassels appear.

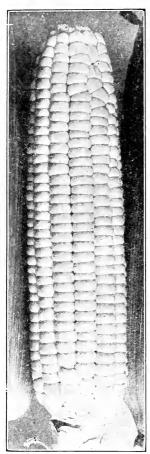
MAMMOTH WHITE CORY

We consider this the best extra early corn for the market and home garden. The ears are very large for so early a variety. The stalks are about four feet high, each generally bearing two large, finely shaped ears which become fit for use as early as those of any variety. They are twelve rowed, six to seven inches long, very symmetrical and handsome, seldom with any opening between the rows at the base. The grain is large, broad, very white and of remarkably good quality for such an early sort. We have found that Mammoth White Cory makes a large and attractive ear of good quality earlier than any other corn.

STOWELL'S EVERGREN The standard main crop variety, much used for the home garden, market and canning. It is hardy and productive, very tender and sugary, remaining a long time in condition suitable for boiling. Our stock has been carefully grown and selected to avoid the tendency to a shorter grain and deterioration in the evergreen character of this best known of all late sorts. The ears are about seven to eight inches long, fourteen to twenty rowed, with very white grain. The stalks are about seven and one-half feet high.

COUNTRY GENTLEMAN This variety has a small, white cob, densely covered with irregular rows of very long slender, white grains of excellent quality. The ears are seven to nine inches long. The stalks are from six and one-half to seven feet high. It is well adapted for canning as well as the home garden and market, and many consider it as the best of the late varieties.

GOLDEN BANTAM This is an early sweet corn with golden yellow grain, very tender and of excellent quality. The ears are eight rowed, six to seven inches long and of the medium size found most suitable for the table. The flavor is exceptionally rich and delicious. The stalks are four to five feet high. Our stock of this splendid home garden and market variety has been very carefully selected and is decidedly superior to much that is offered.



Stowell's Evergreen

EARLY MINNESOTA This deservedly popular variety is one of the best second early sorts for the market and the home garden. The stalks are about six feet high bearing one or two ears well covered with husks. The ears are about eight inches long, eight rowed; kernels very broad, white, sweet and tender, not shrinking much in drying. By careful selection we have developed a stock of this standard variety which is remarkably uniform and in which all the good qualities that have made this sort so desirable are intensified.

HOWLING MOB A large eared early sweet corn, ready for use about five days later than First of All, generally producing two good ears to a stalk, averaging 7 to 9 inches long, with 12 to 14 rows of pearly-white grains. The stalks grow 4 to 5 feet high. An excellent home or market sort.

BLACK MEXICAN This corn, when very young, cooks remarkably white, but the ripe grain is bluish black. For home use we consider it the best second early sort where tenderness and sweetness are the qualities most desired. It does especially well as a second early variety in the South. The stalks are about six and one-half feet high. The ears are about eight inches long and are usually eight rowed.

EARLY MAMMOTH Produce the largest ears of any early sort.

ADAMS' EXTRA EARLY A great favorite with those who wish the first corn of the season. Produces short ears well filled with tender, white kernels of fine flavor.

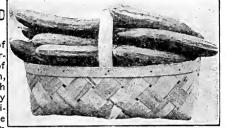
ADAMS' EARLY Has larger ears than the preceding. Very popular in the South.

### CUCUMBER

Cucumbers succeed best in warm, moist, rich, loamy ground. They should not be planted in the open air until there is a prospect of settled warm weather. Plant in hills about four feet apart each way. The hills should be previously prepared by mixing thoroughly with the soil in each a shovelful of well-rotted manure. Spray vines liberally to protect them from bugs, and when all danger from insects is past, thin out the plants, leaving three to four of the strongest to each hill. One ounce of seed will plant about 50 hills; two pounds will plant an acre.

#### CHICAGO OR WESTERFIELD PICKLING

The fruits of this very desirable sort are of medium length, tapering at each end, with very large and prominent spines. The color is deep



green. This is a very prolific variety and one of the best for those who want crisp, coarsely spined pickles.

BOSTON PICKLING This is a very productive variety that is extensively grown for pickles. The vines are vigorous. The fruits are bright green, of medium size, very smooth and symmetrical. The flesh is crisp and tender. Our seed is decidedly superior to much that is offered.

EARLY CLUSTER An early and very productive variety. The vines are hardy and very vigorous, bearing fruits in clusters of two or three. The fruits are short, thick, bright green, shading lighter at blossom end, crisp and tender. This sort is planted in many sections for the home garden. It is extensively used for a pickling cucumber as well as for slicing.

IMPROVED LONG GREEN The vines are very vigorous and productive. The fruits are very long, often twelve to fifteen inches when mature. They are uniformly slender and of beautiful dark green color. The large warts and spines are well distributed over the surface instead of being clustered at one end as in inferior stocks. The variety furnishes some fruits early but matures the bulk of its crop rather late. It is a standard sort for slicing and is very largely used for pickles. The fruits are often used for making sweet pickles. This is probably the most extensively used cucumber for the home garden and market.

THE CHESTERFIELD CUCUMBER ONE OF NATURE'S SURPRISES. A terrific lent flavor. Splendid for pickling. The very best for slicing. Superior main crop variety.

Accidentally discovered a few years ago. A single vine in a field of long green cucumbers climbing a dead cherry tree, giving it the unique appearance of a tree loaded down with immense long, smooth cucumbers unequaled in the entire field. By careful work it has been greatly developed and needs but to be known to take rank as the leading cucumber now in the market. It will climb brush, corn, trellises, okra, etc., thus requiring less space for growing than other sorts, but may be grown flat if desired. If permitted to climb the fruit grows longer, more uniform in size and color and would be free from specks and imperfections caused by the insects and soil coming in contact with stock on the ground.

After the ground becomes warm, plant in hills 4 feet apart, about 8 seeds to each hill. Later thin to 3 and 4 to hill. Place moth ball on hills for insects.

#### EXTRA LONG OR EVERGREEN WHITE SPINE

The fruits of this very desirable table sort are long, cylindrical, very dark green, with very white, crisp and tender flesh. The vines are vigorous and productive and come into full bearing somewhat later than Early White Spine. The mature fruits are about eight to ten inches in length. This variety is adapted also for forcing.

ARLINGTON A medium early white spined cucumber, more slender than Early White Spine and pointed at each end. The young fruits are crisp and tender. The mature fruits are bright deep green and are about seven inches in length, sometimes longer. This variety is extensively used for the home garden and for bulk pickles.

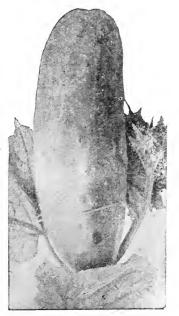
EARLY SHORT GREEN This variety is known also as Early Frame. It is an early, bright green cucumber of medium size, very extensively used for slicing and pickling. The vines are very vigorous and productive. The fruits are straight, a little smaller at the ends, bright green in color, shading lighter at the blossom end. The flesh is crisp and tender. The variety is extensively used for the home garden. Our stock is very superior.

#### EARLY WHITE SPINE

One of the best sorts for table use. The vines are vigorous, fruiting early and abundantly.

#### SMALL GHERKIN

(For Pickles). This is a very small, oval, prickly fruited sort quite distinct from all others and grown exclusively for pickles. It is the smallest of all the varieties and should always be picked when young and tender.



The Chesterfield

#### **CUCUMBER—Continued**

JAPANESE CLIMBING Can be trained upon a trellis or poles, which will insure earlier ripening and a straight, handsome form, in the large fruits. It endures summer heat and drought exceedingly well. It is entirely distinct. Quality splendid. Is adapted for pickling, as well as for slicing for salads. The cucumbers are 12 inches in length. Skin smooth, dark green, turning to brown and netted with ribs. The flesh is pure white, crisp and of mild flavor.

KLONDIKE A medium early, white spined cucumber of handsome, very dark green color and of excellent quality for slicing. The vines are very hardy and productive. The fruits when mature are about eight inches long, very uniform in size and shape. Color dark green, slightly striped at the ends. The dark green color is retained much longer and is affected less by the hot sun than any other sort with which we are familiar. Its uniform size and shape, and splendid color is making this variety very popular as a shipping sort.



### EGG PLANT

CULTURE The seed are sown in hot-beds from the 5th to the 25th of January. The young plants are very delicate, and require very careful attention to prevent set-back from getting chilled. When the plants are 2 to 3 inches high, transplant, either to another bed, or to baskets, as for early cucumbers and cantaloupes, these baskets being so constructed that when the plants are ready to set in the open field, the box can be torn off without disturbing the roots. Prune up the leaves to 3 or 4 from top, to aid in stockiness of plant. Transplant to open field after all danger of frost is over and the weather is permanently warm, setting in rows  $4\frac{1}{2}$  feet apart, and 3 feet apart in the row. The ground should be richly manured, and kept well cultivated. Potato bugs are very fond of the young plants, and every care should be taken to keep them off.

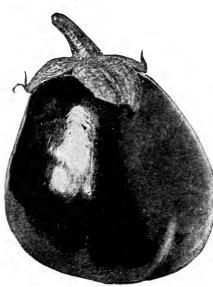
One ounce seed will give 800 to 1,000 plants.

IMPROVED BLACK BEAUTY

The best variety of all. Rich dark purple in color, large and very symmetrical, and matures the fruit quicker than other varieties. The fruit is entirely spineless, and holds its color for a long time.

NEW YORK IMPROVED PURPLE The leading sort for home and market. Plant is a vigorous grower. Fruit large, fine and free from thorns, and produced until frost. Skin rich purple. Flesh white and of good flavor. We can highly recommend our carefully selected strain of this egg plant to market gardeners and amateurs.

EARLY LONG PURPLE The earliest variety in existence.



Black Beauty

IF YOU DO NOT HAVE OUR LATEST PRICE LIST-WRITE US.

### KALE OR BORECOLE

PLANTING AND GROWING DIRECTIONS

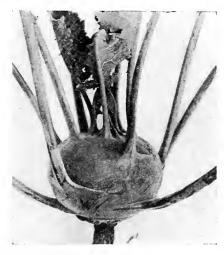
Loose, curly leaved types of the cabbage family, particularly noted for their hardiness. They make excellent tender greens for winter use. In the South the most hardy varieties remain in the open ground all winter. Cultivate the same as cabbage. One ounce of seed is sufficient for 200 feet of drill.

DWARF CURLED SCOTCH (Dwarf German). Fine curled, bright green leaves. very tender and of excellent flavor.

CURLED SIBERIAN, OR BLUE A fast grower, and a very hardy plant, and is especially valuable on account of its rapid growth in the spring. Very tender, and much more esteemed for family use than the Scotch. The leaves are large and comparatively plain in the center, but heavily curled on the edges.



HAVE OUR
LATEST PRICE
LIST
WRITE US



White Vienna Kohlrabi

### **KOHLRABI**

PLANTING AND GROWING DIRECTIONS

Grown for its thick, bulb-shaped stalks, which, while young, are prepared in the same manner as turnips and which furnish a most desirable vegetable. One ounce of seed will drill 200 feet.

EARLY PURPLE VIENNA Similar to the Early White Vienna except in color, which is a bluish purple.

EARLY WHITE VIENNA Fine for forcing or cultivation in open ground. Has very short tops. Flesh is white, tender, and of excellent table qualities.

### LEEK

A very delicately flavored member of the onion family. The leafy portion of the plants is used for flavoring soups or boiling with meats, while the white fleshy stems are boiled and either served with cream dressing, or as a salad with vinegar and salad oil. Cultivate the same as onions. Hilling up will blanch the stalks and improve their quality. One ounce will sow about 100 feet of drill.

LARGE AMERICAN FLAG A desirable strong growing, broad leaved leek, hardy and productive. It is a favorite with many market gardeners and is also extensively used for the home garden.

LONDON FLAG A strong growing sort, hardy and excellent for winter use.

London Flag Leek

GIANT CARENTAN The largest variety, when well grown often three inches in diameter, white and tender. It is an exceptionally hardy garden sort.

Be sure to see our latest price list before placing your seed order. It's prices will interest you.

### LETTUCE

For early outdoor culture in the latitude of St. Louis and southward the seed may be planted in the fall, protecting the young plants from severe freezing either with frames or coarse litter which may be removed as soon as danger of severe freezing is over. Lettuce in ground out of doors will stand some freezing but is killed by prolonged frost or frequent freezing and thawing. North of St. Louis an early crop may be secured by starting under glass from January to March and hardening off well before setting in ground, which should be done as soon as weather will permit.

Lettuce to be at its best should be grown as rapidly as possible, hence the soil should be made as rich and friable as possible by liberal manuring and thorough preparation. For winter, sow under the glass from November to February and thin out as necessary to prevent crowding. Keep a moderate heat and give all the light and air possible. For general crop, sow outdoors as early in the spring as the ground can be worked, in drills eighteen inches apart and thin the young plants to four inches apart in the row. As the plants begin to crowd thin them out and use as required. In this way a much longer succession of cuttings may be had from the same ground. For the cabbage or heading varieties where large heads are desired, the plants should be thinned ten to twelve inches apart in the row.

EARLY TENNIS BALL or BOSTON MARKET. One of the best heading lettuces, especially desirable for early planting outdoors and also suitable for forcing. The plants are large, with thick, bright green leaves. They form very solid heads, the inner leaves blanching to a rich, creamy white, and are crisp, tender and buttery.

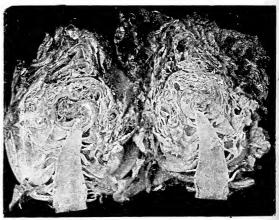
SALAMANDER A very extensively used sort of excellent quality for the home garden and market. The variety withstands hot weather remarkably well. It forms a large compact, light green plant. The leaves are broad, thick, somewhat crumpled and closely overlapping so that the inner ones are very finely blanched. It is one of the most satisfactory heading lettuces for growing outdoors.

BIG BOSTON This market variety is very popular for outdoor culture and is also in demand as a compact, large heading, forcing sort for cold-frames. The plants are large, very hardy and vigorous. The leaves are broad, comparatively smooth but wavy at the edge, thin, very hard and crisp. In color they are bright light green, the head slightly tinged with reddish brown. The inner leaves blanch to an attractive greenish white, tinged with light yellow. It heads up under cold weather conditions better than any other variety, and is grown very extensively in the South for shipment north in the winter.

MAY KING This is a handsome, extremely early, compact, cabbage or heading variety for the home garden and market, forming very firm heads of medium size and excellent quality. The color is light yellowish-green, tinged with reddish-brown when mature. The inner leaves blanch rich golden-yellow, very tender and buttery. The plant is very compact for so large a head. The variety is exceptionally early outdoors, attaining a size suitable for use before other sorts and is also very satisfactory for forcing.

THE DEACON LETTUCE This is also called San Francisco Market, Large Russian, Vauxhall. This magnificent lettuce withstands hot weather better than any other of the rich butter varieties, and is justly most popular. Plants make firm heads, nearly as large and almost as solid as a cabbage. The heads are light green outside, while the inner blanched portion is beautiful cream-yellow, of delicious, rich buttery flavor.

ALL SEASONS called an "Improved Deacon." Heads of a light golden tint, well folded, and with inner leaves blanched to a rich buttery yellow, which is so much desired in serving various salads with mayonnaise dressing.



ST. LOUIS MARKET One of the popular varieties of head lettuce. Well known among market gardners for its tender, crisp head and its slowness to shoot seed pods.

PRIZEHEAD Forms large, loose heads, which will not stand shipment to distant markets. The outer leaves are bright green, shaded with brownish red. They are large and thin, attractively curled and very tender.

HANSON Grows to large size and is uniformly sure heading. Heads very solid and beautifully blanched; crisp, mild, and tender. One of the finest varieties to grow for market during the summer months. Our stock is unexcelled.

NEW YORK "WONDERFUL" OR LOS ANGELES. Plants of extra large growth, producing heads of immense size and closely folded; inner portion is beautifully blanched. Outer leaves a deep rich green.

DENVER MARKET ity; leaves light golden green; beautifully savoyed.

#### LETTUCE-Continued

EARLY CURLED SIMPSON OR SILESIA White seeded. Forms a close compact mass of curly yellowish green leaves, slightly frilled, crisp, tender and sweet. Good for sold frames, or early out of doors planting.

COS LETTUCE (Romaine) This kind of lettuce is distinguished by its long, narrow, spoon-shaped leaves, folding into loose, sugar-shaped heads which blanch better by having the outer leaves drawn about them and tied. The quality is distinct from that of the cabbage lettuces and by many is considered very superior.

Sow seed early in spring in rich, well prepared soil, in rows eighteen inches apart, covering one-half inch deep. When plants have two or three leaves thin to three or four inches apart. As the plants begin to crowd thin and use as required. If large heads are desired plants should be thinned ten to twelve inches apart.

EARLY WHITE SELF-FOLDING This excellent variety, also called Trianon, forms a large light green plant with a well folded head of very good quality. The midribs are white and very prominent. The inner leaves are nearly white, slightly tinged with green, and are decidedly firm and sweet. This is considered the most reliable of the Cos or celery lettuces for the home garden or market gardeners' use in this country.

GRAND RAPIDS FORCING

Recognized as the standard forcing variety, but is not a head lettuce. The plant is upright, and forms a loose head of large green leaves, crimpled at the edges. A good sort for shipping, as it does not break easily, or wilt.



Early Curled Simpson

BLACK SEEDED SIMPSON A very popular sort among market gardners. It forms large loose heads, with thin, very tender leaves of fine quality, golden yellow to almost white in color. Fine for forcing and early planting out of doors. Uniformly attractive, and remains of excellent quality for a long time.

### WATERMELON

To make certain of raising good watermelons, it is essential that the plants have a good start and to this end it is important to prepare hills about eight feet apart, by thoroughly working into the soil an abundance of well rotted manure—hen manure, guano, or other forms rich in nitrogen, being most desirable. Over this highly manured soil put an inch or more of fresh earth and plant the seeds on this, covering them about an inch deep.

It is important that the seed should not be planted before the ground becomes warm and dry, as the young plants are very sensitive to cold and wet. Put ten or twelve seeds in a hill. When the plants have formed the first pair of rough leaves, they should be thinned so as to leave two or three of the strongest and best to each hill.

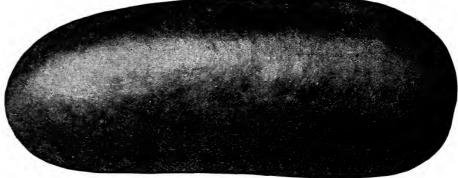
Frequent watering of the plants with liquid manure will hasten the growth, thus diminishing the danger from insect pests. If the striped beetle appears use tobacco dust freely. The best protection against blight and insect pests is to maintain a vigorous and continuous growth. It is desirable to change the location as often as practicable. HARRIS' EARLIEST An extra early melon of excellent quality. The fruits are exceptionally large for so early a variety, slightly oval with irregularly mottled broad stripes of light and dark green. The flesh is bright red, sweet and tender. Seed black. The vines are vigorous and productive. One of the best varieties for northern latitudes.

HALBERT HONEY Originated in Texas and particularly adapted for the South. It greatly resembles the Kleckley Sweets, but is of darker color and more even and regular in shape. Can not be shipped great distances, as the rind is very brittle, but it is unsurpassed for home markets and family use. It grows from 15 to 30 inches long, is dark green, slightly ridged and blunt at the blossom and stem ends. The meat is sweet as honey, melting and leaves no trace of pulp. Brings always higher prices than any other melon on the market.

#### WATERMELON — Continued

TOM WATSON You will go a long ways without finding a better melon than the Tom Watson. It is the most widely planted melon in the South. There is no need of telling you about the quality—no melon has better flavor. You'll make no mistake in planting Tom Watson melons and certainly you'll make no mistake in planting our seed. We have used unusual care to see that our strain is pure and we know from our tests that our seed is high in vitality.

PEERLESS Sometimes sold as Ice Cream. One of the best early sorts for the home garden and for market gardners who deliver direct to consumers. The vines are moderately vigorous, hardy and productive. The fruits are very tender, medium sized, oval to medium long, bright green, finely veined with a darker shade. The rind is thin. The flesh is bright scarlet, solid, crisp and very sweet. Seed white.



EXCEL This new melon provides the planter and shipper who is always looking for something better, something real and worthy to tie on to. In a word, where hauling and shipping to distant market is done, this new melon does really EXCEL.

It is long like the Watson and Means, but not slim like them. It is fat, full, and larger than other long varieties. The color is dark green with very dark ornamenting stripes. On close inspection the very small, vein-like, criss-cross marking similar to the Watson may be observed. Though the flesh is firm and solid, there is less "stringiness" than in many other varieties. There is no hard, white heart to discard. These qualities and this make-up naturally constitute a melon wonderfully resistant to the abuse incident to rough hauling and long shipping. It is an excellent keeper. This melon may be left in field three weeks after first ripe and then shipped to distant market and keep well.



FLORIDA FAVORITE A splendid melon of very large size and excellent quality. The fruits are long, dark green, with irregular mottled striping of a lighter shade. The rind is thin but firm. The flesh is very bright, deep red, very sweet and tender. The vines are vigorous and productive. Seed nearly white.

KOLB'S GEM A very large, round or slightly oval melon, often flattened on the ends, marked with irregularly mottled stripes of dark and light green. The rind is exceedingly hard and firm, making it one of the best round sorts for shipping. The flesh is bright red, solid, a little coarse, but sweet and tender. The vines are vigorous and productive. Seed black.

ALABAMA SWEET

A very large, long melon of excellent quality, popular in the South where it is grown extensively for shipping. The color is rather deep green, with dark, irregular striping. The rind is thin but very tough. The flesh is bright red, fine grained and sweet. The fruits average a little thicker than Florida Favorite. Seed nearly white.

CUBAN QUEEN Large oval shape, striped dark and light green. Flesh red, quality excellent, the best late sort.

MOUNTAIN SWEET A large variety. Oblong in shape and of good size. Striped light green. Thin rind. Flesh deep and scarlet and deliciously sweet and a good shipper.

WRITE FOR OUR LATEST PRICE LIST FOR YOUR GUIDANCE

### GEORGIA OR KLECKLEY SWEETS

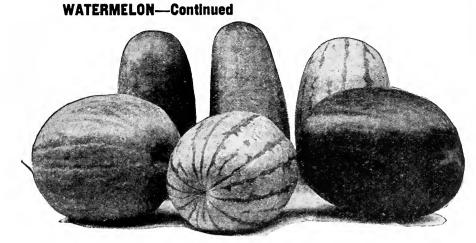
One of the best and sweetest flavored varieties in cultivation. On account of its thin rind it will not stand shipment to distant markets, but it is the best that can be grown for home use and nearby markets. The skin is dark green. It is of symmetrical oblong shape, well rounded on both ends. The flesh is scarlet, firm and solid, and of delightful sugary flavor. Fancy selected southern-grown seeds.



Kleckley's Sweets

#### **RUFUS RASTUS**

The grandest, sweetest melon in the whole world. Praised from the Atlantic to the Pacific. Bright scarlet flesh with a solid heartsweet, sugary, delicious flavor; a most superb watermelon. Larger, more uniform shape, more prolific vielder than Kleckley Sweet. A dark green oval melon, 24 to 30 inches in length, 12 to 16 inches in diameter, thin rind. Best for the market.



SWEET HEART The vines are vigorous and very productive, ripening their fruit evenly. The fruits are of largest size, oval but flattened at the ends and very heavy. The rind is very firm. The color is very light green, very slightly veined with a little darker shade. The flesh is bright red, firm but very sweet. The fruit remains in good condition a long time after ripening. Seed black. Our stock will be found very uniform in shape, size and color.

GYPSY OR GEORGIA RATTLESNAKE One of the largest and best known home garden and shipping sorts, especially adapted for the South. The fruits are very long, of a light green color, distinctly striped and blotched with a darker shade. The flesh is bright scarlet, tender and sweet when grown in the South, although usually the fruits are too late maturing to ripen properly in the North. The vines are large and vigorous. Seed nearly white.

YELLOW-FLESHED ICE CREAM This melon grows size, is long in shape and the rind an even dark green. In quality it is simply delicious, sugary and of a rich flavor peculiar to itself.

TRIUMPH A southern variety of strong vigorous growth. The fruits are of largest size, nearly round, dark green, sometimes indistinctly striped with a lighter shade and have a firm rind so that they stand shipment exceptionally well. The flesh is bright red and of good quality. Seed black.

CITRON The fruits are medium sized, uniformly round and are used exclusively for preserves or pickles. The color is dark green, distinctly striped and marbled with light green. The flesh is white and solid but is not at all suitable for eating raw. Seed red. The fruits mature late in the fall and in this condition can be kept for a long time.

### MUSKMELON

After danger of frost is past, the ground being warm and in good condition, plant in rich soil, preferably sandy loam, in hills about four to six feet apart according to the vigor of the variety. Put ten or twelve seeds in a hill, covering with about an inch of fine soil firmly pressed down. When the plants begin to crowd and the striped beetles are pretty well gone thin to four of the most vigorous plants in a hill. Give frequent but shallow cultivation, until the plants make runners so long that this is impracticable. Rich earth for the young plants is far better than manure, but if the latter must be used, see that it is well rotted and thoroughly mixed with the soil.

The quality of all varieties of muskmelons is largely dependent upon conditions of growth and ripening. Unhealthy vines or unfavorable weather produces fruit of comparatively poor flavor.

The plants are liable to attack from the striped beetles which are so numerous in some cases as to destroy them. The beetles may be kept off by frequent dusting with air-slaked lime, soot or sifted ashes diluted with fine road earth. Care should be taken not to use too much of any of the above materials or the vines will be injured. Should even the diluted material prove injurious to the vine, use road earth only, as frequent dusting with this alone will often prove effective especially if a wind is blowing. After the plants have four to six leaves it is considered a safeguard against blight to spray with Bordeaux Mixture at intervals of about ten days, adding either Paris Green or Arsenate of Lead for the eating insects.

#### **MUSKMELON**—Continued

LARGE HACKENSACK

A well known sort of good quality. It is considered the best of the very large green fleshed melons. The vines are hardy, vigorous and productive. The fruits are nearly round, always somewhat flattened. The ribs are large and of irregular width, and the fruits are densely covered with coarse netting. The flesh is green, thick, coarse but juicy and sweet.

EXTRA EARLY HACKENSACK This early green fleshed variety is popular in many sections as a market melon and is also extensively used as a home garden sort. The fruits are nearly two weeks earlier than Hackensack, medium to large sized, nearly round or somewhat flattened, evenly and deeply ribbed and with very coarse netting. The skin is green, slightly tinged with yellow as the fruits mature. The flesh is green, a little coarse but juicy and sweet.

ROCKY FORD This has become one of the most popular of small or crate melons and is shipped in large quantities from Colorado and Arizona. It is also a desirable medium early sort for the home and market garden. The vines are vigorous and productive. The fruits are oval, slightly ribbed, densely covered with fine netting. The flesh is green, very sweet and highly flavored. We offer an exceptionally fine stock of this early sort, the fruit being very uniform in shape and quality and of the even size that is so desirable in a shipping melon.

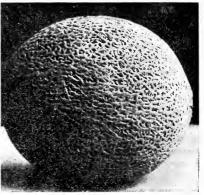


BALTIMORE OR ACME The fruits of this midseason green fleshed sort are medium sized, oval or long oval, slightly pointed at stem end, slightly ribbed, and are covered when ripe with coarse netting. The flesh is thick, green, well flavored and sweet. This variety is a very productive, sure cropper of good quality. It is extensively grown in some sections for the markets, also as a home garden melon.

CASSABA MELON The Cassabas are primarily for winter use. They require a long season for maturing but the fruits are exceptionally good keepers. The skin of the fruits is usually furrowed and they possess little or none of the common muskmelon odor. Seed may be planted in April or May. Cultivate same as other muskmelons but do not water too freely after first setting of fruit is fully grown. The fruits may be picked when the light streaks have become quite yellow. Store the fruit so they do not touch each other, in a cool dark place. When the rind becomes slightly softened and moist, they are ready to cut.

SANTA CLAUS

There are many varieties of Cassaba but this is by far the best for this section. It will grow on most any kind of land, but like other melons thrives best on sandy soil. It is more hardy than



Texas Cannon Ball

muskmelons and is not so susceptible to insects. Thin, hard skin with yellowish-brown markings, flesh light green and good flavor. Can be pickled in September or October, and will keep for several months, and can be eaten Christmas.

EDEN GEM This famous variety is the finest early green-fleshed melon in cultivation. Flesh light green in color, firm but melting, of uniformly fine flavor.

BURRELL'S GEM A very large nutmeg. Uniform size and shape. Well ribbed. Finely netted. Flesh green, very juicy and sweet, delicious flavor. Seed cavity very small. Seldom crack or rot. Excellent for early market.

EMERALD GEM A most delicious small melon. Extremely thin rind. Flesh of a beautiful salmon color, almost red. Flavor unexcelled.

ADMIRAL TOGO or ORANGE FLESHED ROCKY FORD. A small oval musk melon with the very thick, orange flesh. This is a desirable medium early sort for the home and market garden. We consider it the best small shipping melon yet introduced.

EXTRA EARLY GREEN CITRON (Nutmeg). Medium sized fruits, are nearly round and deeply netted. Of delicious flavor.

TIP-TOP Large, nearly round fruit, slightly ribbed, and covered with shallow netting, with light yellow skin when mature. The flesh is deep yellow, very rich and luscious.



H00D00 Sometimes sold as Ordway Queen. An orange fleshed variety of medium size, ideal as a shipping melon and a desirable mid-season sort for the home garden. The vines are vigorous, blight resisting and very productive. The fruits are nearly round and are uniformly of medium size. The netting is exceptionally fine and dense, extending over practically the entire surface. The rind is thin yet very firm, so that the melons arrive in perfect condition in distant markets. The flesh is very thick, firm, highly colored, of fine texture and delicious flavor.

TEXAS CANNON BALL This has the smallest seed cavity of all cantaloupes. Round, medium size, heavily netted. Flesh is green, solid and of delicious flavor. A splendid shipper. This is a popular variety—among both commercial growers and home gardeners.

#### MUSKMELON—Continued

NEW HONEY DEW MUSKMELON A Wonderful New Melon Sold at Fabulous Prices in All Leading Markets. (Green flesh). Honey Dew is a new type of muskmelon, and is the result of crossing the Rocky Ford with a South African melon. They grow uniform in size, about 6 inches in diameter from top to bottom and 7 or 8 inches long. The color is a dull white when ripe, having no netting. The rind, though thin, is very tough and so close that the excellent flesh is practically sealed up where it keeps in fine condition for several weeks after they are ripe. The flesh is a rich green color, very sweet and possesses a delightful flavor. The vines are more productive than the ordinary kinds and the muskmelons are superior shippers. The seed we are offering was grown from the originator's stock by one of the best melon growers in Rocky Ford, Colorado.

OSAGE MELON OR MILLER'S CREAM One of the best melons on the market for family use and also greatly liked by gardeners. The skin is thin, dark green color and slightly netted. The flesh is salmon color, remarkably sweet and spicy in flavor; extremely thick and delicious to the rind. The seed cavity is very small. It is seldom that one of poor quality is found. The whole crop is very even and extra heavy owing to the thickness of the meat. All lovers of fine melons should try the Osage.

IMPROVED BANANA Produces fruit of the finest quality,  $1\frac{1}{2}$  to  $2\frac{1}{2}$  feet long. Rind thin and comparatively tough. Flesh of beautiful reddish salmon color, of excellent flavor. Withstands the heat to perfection. Excellent for family use. Will also ship well if gathered at the proper stage.

### MUSTARD

Mustard is not only used as a condiment but the green leaves are used as a salad or cut and boiled like spinach. Sow as early in the spring as the ground will permit, in drills about eighteen inches apart, covering one-half inch deep. For succession, sow every few weeks till autumn. Water freely. In the South the seed may be sown in autumn and the plants used early in the spring as a salad and for greens.

WHITE LONDON The leaves are comparatively small and smooth, deeply cut or divided and of medium dark green color. The plant is upright, of rapid growth and soon bolts to seed. The leaves, when young, are

mild and tender. Seed light yellow and larger than that of other varieties.

SOUTHERN GIANT CURLED The leaves are large, light green with tinge of yellow, much crimped and frilled at edges. The plant is upright or slightly spreading in growth. This variety is highly esteemed in the South for the market as well as the home garden on account of its vigorous growth, hardiness and good quality. Seed small, reddish brown to nearly black.

CHINESE SMOOTH LEAVED An excellent sort with very large, light green, plain or comparatively smooth leaves, borne well above the ground. The plant is of very quick growth, fairly upright when young, becoming somewhat spreading at maturity. This sort is preferred by many as it is more easily prepared for the table than the rougher leaved varieties. Seed small, reddish-brown to nearly black.

OSTRICH PLUME This is a valuable sort. Produces large, curled leaves of excellent quality.

FORDHOOK FANCY Large curled leaves of good quality.

BLOOMSDALE LARGE LEAVED A valuable market sort, being ready early in the spring.

BLACK OR BROWNA vigorous grower leaves of an oblong shape deeply cut. Seed brown.

### OKRA OR GUMBO

Cultivated for its young seed pods which are used in soups, stews, catsups, etc. It is highly esteemed in the Soutb. Plant in rows about two and one-half feet apart. When about three inches high, thin to about one foot apart in the row. Cultivate and keep free from weeds. The pods are in best condition for use when from one to three inches long.

WHITE VELVET

Plant is about three and one-half feet high, early maturing and very productive. Pods white, long, smooth and are tender until nearly full sized.

PERKINS' MAMMOTH LONG POD This variety is about three feet high, very early and productive. Pods deep green, very long slender, slightly corrugated, very tender and of good quality.

IMPROVED DWARF GREEN A distinct early variety. Pods short but very numerous.



White Velvet Okra

### ONION SEED

CULTURE Onions do best on a rich loam, previously cultivated for two years. Stiff clay and light sand are equally unfavorable. The land should be highly fertilized with well-rotted manure, complete fertilizers, etc. Fresh stable manure has a tendency to produce soft onions. For dry (fall) onions a packet will sow about 50 feet of drill, an ounce about 300 feet, 4 to 5 lbs. of seed per acre. Sow in drills 12 to 18 inches apart as early in spring as possible and cover one-half inch deep. When large enough thin to 2 inches apart. If sets are wanted, sow seed thickly and don't thin out; use 60 to 80 lbs. of seed per acre. Six to ten bushels of sets will plant an acre. Fine marketable size onions (according to variety planted) are easily produced the first year from early spring sown seed, maturing in from 65 to 120 days. Culture should be frequent though shallow. The same ground may be used for onions, season after season, if well fertilized annually. Bone meal is an excellent fertilizer. Winter storage demands dryness and protection from sudden changes. Onions should never be handled while frozen.

SOUTHPORT RED GLOBE

This most excellent medium early or main crop red variety produces bulbs of medium to large size, ideally globe shaped, with very smooth, glossy surface, very small neck and remarkably beautiful deep purplish red color. The flesh is white, tinged with light purple, mild, very fine grained and tender. The variety is extensively grown for home use as well as the market. It is one of the best keepers and is well adapted for shipping.

LARGE RED WETHERSFIELD

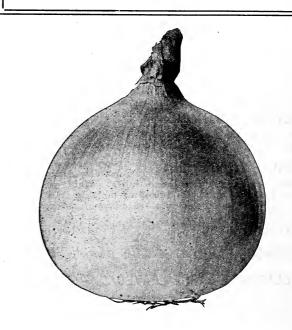
This is the standard red variety and a favorite onion in the East, where immense crops are grown for shipment. It is very extensively grown for home garden use as well as the market. The bulbs are large and are flattened yet quite thick. The skin is deep purplish red. The flesh is light purplish-white, moderately fine grained, rather strong but of pleasant flavor. The variety is very productive, one of the best keepers and very popular for general cultivation. This medium early or main crop variety does best on rich, moderately dry soil, but on low muck land it is more apt to form large necks than the Danvers. There is no better sort for poor and dry soils.

YELLOW FLAT DANVERS A productive and very extensively used early or main crop variety of medium size. The skin is light coppery yellow in color. The flesh is creamy white, mild and of excellent flavor. The bulbs are flattened yet quite thick with small necks, ripen down quickly and very evenly and keep very well. This is still a standard, general crop, yellow onion for the home garden and market where a strictly globe shaped bulb is not demanded.

YELLOW GLOBE DANVERS

One of the most extensively used main cropyellow onions for the home garden and market. The bulbs are of medium to large size, uniformly globe shaped, with small neck, and ripen very evenly. The skin is rich coppery yellow. The flesh is creamy white, crisp and of mild and excellent flavor. The variety keeps very well and is excellent for shipping. We have by careful selection and breeding developed a strain which has the ripening habit and small neck of the original Danvers and yet is more globular, thus giving larger yields and handsomer bulbs without sacrificing any of the good qualities of the original Danvers.

#### ONION SETS-SEE PAGE 41



### MAMMOTH YELLOW SPANISH OR PRIZETAKER

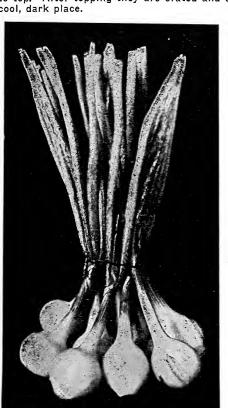
A very handsome late or main crop onion of the largest size and nearly globular in form, usually with shoulder and base slightly sloping. The skin is yellowish-brown or light yellow with slight tinge of brown. The flesh is creamy white, very mild, tender and of excellent flavor. The variety keeps well if thoroughly ripened and is very desirable for shipping for fall and early winter use. It is one of the best of the large European sorts that has become thoroughly acclimated in America and is exceptionally productive under proper conditions. If started very early in hot-bed it will produce a mammoth onion the first season.

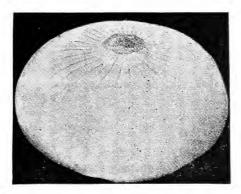
#### ONION—Continued

WHITE PORTUGAL OR AMERICAN SILVERSKIN This is a medium sized onion of mild flavor and with beautiful, clear white skin. The variety is a favorite with many for use when young as a salad or bunching onion and for pickles. It usually matures about ten days earlier than White Globe and is fine for fall and early winter use. It is an excellent medium early sort for gardeners who do not care to plant more than one variety. The bulbs are nearly round when of bunching size, somewhat flattened when mature. This is the best flattened white onion for northern lati-

WHITE GLOBE A most desirable medium early or main crop variety for the home garden. It is sometimes called South-port White Globe. The variety yields abundantly, producing medium to large, handsome and finely shaped, clear white bulbs. The flesh is firm, fine grained, quite mild in flavor and is more attractive than the colored sorts when cooked. The bulbs are globe-shaped, full at the shoulder, rounded at the base, keep well and are desirable for shipping. It is characteristic of the best stocks of White Globe to have many bulbs

with a splash of magenta-red on the outside covering. To produce the beautifully white onions so much sought in every market, one must first of all have good seed; second, grow them well on rich lands; third, exercise great care in harvesting and curing the crop. For fancy Red and White Globes the bulbs must be pulled as soon as the tops fall and placed in an airy situation until dry enough to top. After topping they are crated and stored in a dry, cool, dark place.





MAMMOTH SILVER KING This variety produces a very large onion, resemblater maturing and rather a better keeper, making the sort more desirable for the fall market. It is a very productive flat variety with bulbs often four to five inches across, the largest of the white onions. The skin is silvery white. The flesh is white, very tender and mild flavored.

#### **BERMUDA ONIONS**

Growing the mild Bermuda Onions for northern markets has reached phenomenal proportions in Southwest Texas. We try to assist truckers and gardeners to secure first-class crops by importing every year from the Teneriffe Islands (the home of Bermuda onion seeds), a choice lot of fresh, genuine seeds. They usually arrive in this country between the first and fifteenth of September, and should be planted as soon as possible thereafter.

CULTIVATION OF BERMUDA ONIONS BY IRRIGATION AS PRACTICED IN SOUTHWEST TEXAS—In the culture of Bermuda Onions there are four things that are very necessary: First, genuine fresh seed; second, plenty of fertilizer; third, thorough cultivation; fourth, plenty of water at the right time.

PLANTING SEED BEDS-It requires about three to four pounds of seed per acre of onions. We get seed from our growers on the Teneriffe Islands, near the west coast of Africa, and they are delivered at the ports in the United States about September 1st to 15th. They should be planted as soon as you can get them. It is best to plant the seed in beds about 120 feet long and 12 feet wide, with ten rows in each bed, rows 12 inches apart. Use a good garden seed drill in planting. These beds are about the level of the land, with small border thrown up around each bed so as to control the water. The beds are made at right angles to the water ditch and further end from ditch a few inches lower, so water will cover the whole bed easily and uniformly. The ditch is built always on the highest ridges of your land, so the beds extending out from them can be made lower at the far end. Water as soon as seeds are planted. They will come up in ten days, and as soon as they are well up, cultivate with double-wheel-hoes through the middle. Water and hoe as soon afterwards as the ground will work nicely, and every two weeks until ready to transplant, which is in 60 days from planting.

TRANSPLANTING—Your transplanting should be done in December. The Laredo growers try to get through this job by Christmas.

CRYSTAL WHITE WAX—(95 days). The best white onion grown; flat and very mild.

YELLOW BERMUDA—(90 days). An early ripener and heavy yielder. RED BERMUDA—(90 days). A flat, mild red onion.

### PEAS

For early peas the soil should be light and warm, but for general crop a moderately heavy soil is better. Fresh manure and very rich or wet mucky soil should be avoided, as they cause a rank growth of vine at the cost of the quality of the peas, furthermore such soil is often the cause of early sorts maturing unevenly.

Sow as early as possible a few of some early variety in warm, quick soil, prepared the fall before, planting in double rows six to eight inches apart and two and one-half to four feet between the double rows. The general crop can be delayed until later, but we have met with better success from sowing all the varieties comparatively early, depending for succession upon selecting sorts that follow each other in maturity.

The peas will give quicker returns if covered only one inch deep and where earliness is most important they may be treated in that way. Larger pods and more of them will be produced if the seed be planted in trenches three to six inches deep and covered with only one or two inches of soil. When the plants are five or six inches high fill the trench level with the surface. This will secure deep rooting, prevent mildew and prolong the bearing season. If the peas be covered to the full depth at first, or if water be allowed to stand in the trenches they will not germinate or grow well.

The wrinkled varieties are more sensitive to cold wet weather than the smooth seeded sorts but are of superior quality. All varieties growing more than one and one-half feet do better if staked up or brushed when four to six inches high. This support is usually given by sharpened branches of trees set between the double rows. The crop should be gathered as fast as it is fit for use. If even a few pods begin to ripen, not only will new pods cease to form, but those partly advanced will stop growing.

FIRST AND BEST

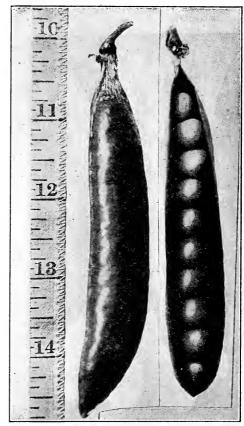
This is the earliest and most even strain of first early white peas, maturing so well together that sometimes a single picking will secure the entire crop. The vines are vigorous and hardy, of medium height, about two and one-half to three feet, bearing three to seven straight pods of good size, about two and one-half to two and three-fourths inches long, each containing five to seven medium sized, smooth peas of fair quality. Seed small, smooth, yellowish white.

ALASKA OR EARLIEST OF ALL As most everyone knows this is by far the earliest of all varieties of smooth peas. Well filled, medium size pods—peas are of excellent flavor. The crop matures at about one time. It is a splendid sort to plant to obtain green peas to can. Our seed is of selected quality and has been tested.

GRADUS A very early, wrinkled pea. The vines are similar in appearance to Telephone but of medium height, only about three to three and one-half feet. The pods are very large, about four and one-fourth inches long, very nearly as large as those of Telephone, uniformly well shaped, pointed, handsome and more attractive than those of the first earliest. The peas are very large, of splendid quality and beautiful light green color which they retain after cooking. Practically the same as Prosperity.

AMERICAN WONDER The earliest of the dwarf, wrinkled varieties. The vines are about nine to twelve inches high and produce a good crop of well filled pods of medium size, about two and five-eighths to two and three-fourths inches long, containing five to eight large peas which ar eexceedingly sweet, tender and well flavored. Seed medium sized, generally flattened, wrinkled and pale green.

NOTT'S EXCELSIOR The best very early, dwarf pea. It combines the good qualities of American Wonder and Premium Gem peas. The vines are larger and more productive than American Wonder and earlier than Premium Gem and average about twelve inches high. The pods are medium sized, about two and three-fourths inches long. The peas, in sweetness and quality, are unsurpassed. Seed medium sized, wrinkled, green and somewhat flattened. A most desirable early sort for the market gardener and unsurpassed for the home garden.



#### **GARDEN PEAS**—Continued

PREMIUM GEM (IMPROVED LITTLE GEM). A very desirable early green wrinkled dwarf variety similar to but better than McLean's Little Gem. The vine is very productive and grows to a height of from fifteen to eighteen inches. The pods are of medium size and crowded with six to eight very large peas of fine quality. The seed is green, large wrinkled. often flattened.

EARLY MAY OR FRAME A popular strain of extra

DELICIA OR DELICATESSEN. THE WONDERFUL NEW DINNER PEA. Enormous size, extremely early. The earliest wrinkled or marrow pea grown. Sweet, tender, enormous marrow peas in early June, as soon as you have heretofore had the ordinary early kinds.

This grand, extra early, large-podded, wrinkled marrow pea—introduced into America in 1905—has each year increased in popular favor, not only steadily, but with whirlwind rapidity. "Once grown it is thereafter indispensable," is the way one of our customers puts it, and it would seem as if everyone who plants our Delicatessen

Pea recommends it to his neighbors.

The distinctive merits of our Delicatessen Pea over any other variety are its extreme earliness combined with its abundant production of immense pods, each filled with from 6 to 10 true, large, wrinkled marrow peas of the most delicious flavor—as large, as sweet and as tender as the finest late wrinkled marrow pea grown. When one considers that peas of this superior size and quality are ready for picking only a day or two later than the little round-seeded hard-shell "Extra Earlies," one realizes what a valuable acquisition our Delicatessen Pea really is.

The vine of Delicatessen is of vigorous, robust growth, about two and one-half feet high, heavy stemmed with luxuriant healthy foliage; it bears uniformly large, handsome pods of large and luscious peas, and although it commences bearing so very early it continues for a long time; the peas also remain sweet and tender for some time after

they are fit to pick. (See cut).

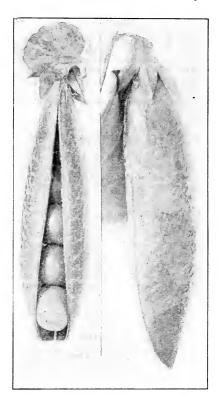
ADVANCER A green, wrinkled variety about two and one-half to three feet high, with long, broad pods which are abundantly produced and well filled to the ends. This pea is used very extensively by market gardeners because of its productiveness, the fine appearance of its pods and is popular with consumers on account of its quality. It is also largely used by canners.

BLISS' EVERBEARING Vine stout, about two and one-half feet high, bearing at the top six to ten broad pods. If these are picked as they mature and the season and soil are favorable, the plant will throw out branches bearing pods which will mature in succession, thus prolonging the season. The peas are large and wrinkled, cook very quickly, are tender, of superior flavor and preferred by many to any other sort.

TELEPHONE The Telephone has become the leading pea with market gardeners whose trade appreciates fine appearance and high quality. Vines vigorous, growing about four feet high, with large, coarse, light col-

ored leaves and producing an abundance of very large pointed pods filled with very large peas which are tender, sweet and of excellent flavor. It comes into use soon after the Premium Gem and is one of the best sorts for either home or market. Notwithstanding the large amount of inferior and spurious stock which has been sold, no pea has attained greater popularity than this, thus showing that it has sterling merit. The stock we offer has been carefully selected and is very prolific.

ALDERMAN This comparatively new pea is in many respects the very best early main crop variety of the valuable Telephone type. The vines grow nearly five feet high, are dark green, vigorous and exceedingly productive. Pods very large, long, dark green, similar to but a little larger and a shade darker in color than Duke of Albany and about the same in season. The peas are of largest size and unsurpassed in quality. Market gardeners are demanding the large podded, dark colored sorts which retain their fine appearance even after shipping a long distance. The Alderman answers these requirements and furthermore is the most productive variety of this class. We recommend it unreservedly.



Delicatessen

#### **GARDEN PEAS—Continued**

DWARF TELEPHONE or DAISY. This grand 20-inch pea is rapidly gaining favor among gardeners of all classes. In habit it is dwarf and stocky. Bears close planting, and requires no sticks or supports. The pods frequently measure 5 inches in length, and are broad, straight and remarkably well filled. A splendid mid-season variety.

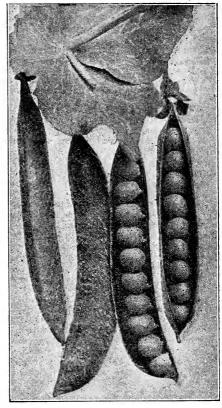
IMPROVED STRATAGEM One of the best of the large podded, semi-dwarf main crop varieties. The vines are very sturdy, about two to two and one-half feet high, with medium dark green foliage. The pods are very large, often four and one-quarter to four and one-half inches long, pointed, dark green, and uniformly filled with very large, dark green peas of the finest quality.

HORSFORD'S MARKET GARDEN The vines of this variety are of medium height, about three feet, hardy and very productive, giving the greatest number of pods of any on our list. The foliage is dark green and the leaves are small. The pods are of medium size, about two and three-fourths inches long, each containing five to seven medium sized, sweet, dark green peas which retain well their color and sweetness after canning. Seed wrinkled and of medium size.

CHAMPION OF ENGLAND A standard, very productive, main crop variety, universally admitted to be one of the richest and best flavored of the late peas. The vines are tall, about four to five feet high. The pods are large, about three inches long. The seed is light green and wrinkled. We consider this variety one of the best of its season, either for the home garden or for market gardening use.

LARGE BLACKEYE MARROWFAT A well known tall, late maturing variety, about five feet high. It is a very prolific bearer of large pods, about three inches long. Seed large, smooth, round, light creamy yellow with black eye. One of the best of the Marrowfat sorts.

LARGE WHITE MARROWFAT The vines of this tall variety are about five feet high and of strong growth. The pods are large, about three inches long, cylindrical, surface somewhat roughened, light colored and well filled. Seed large, smooth, round and light creamy yellow. It is desirable for summer use but is not as sweet and tender as most sorts, although undoubtedly one of the most productive of the garden varieties.



Horsford's Market Garden

MELTING SUGAR (Edible pods). We consider this the best of the edible-podded sorts, in which the pods are used when half grown and are cooked in the same way as snap beans. The pods of Melting Sugar are very large, four to four and one-half inches long, broad, often curved or twisted, and when young, stringless, very tender and finely flavored. The variety we offer, sometimes called Mammoth Melting Sugar, is rather late maturing, very prolific, strong growing, about four to five feet high, with large light colored foliage. Seed medium to large, smooth, round, light yellowish white in color.

A customer writes the following on the bottom of his order: "Your seeds are good and give satisfaction.

Very Respectfully,

J. R. ELLIS,

J. R. ELLIS, Mt. Olive, Miss."

### PARSLEY

This well known vegetable is very useful for flavoring soups and stews and for garnishing. The green leaves are used for flavoring or they may be dried crisp, rubbed to powder and kept in bottles until needed.

Parsley succeeds the best on rich, mellow soil. The seed is even slower than parsnip in germinating and should be sown as early as possible in the spring, in drills one to two feet apart covering not more than one-half inch with fine soil firmly pressed down. When the plants are well up thin eight to twelve inches apart in the row. When the plants of the curled varieties are about three inches high cut off all the leaves; the plant will then start a new growth of leaves which will be brighter and better curled and later, if these turn dull or brown they can be cut in the same way; every cutting will result in improvement.

PLAIN The leaves of this variety are flat, deeply cut but not curled. Very desirable for flavoring soups and stews and for drying. It is a favorite on account of its very dark green leaves as well as its hardiness of plant. The curled sorts are more extensively used for garnishing.

CHAMPION MOSS CURLED This is a vigorous, compact growing variety, excellent for garnishing and flavoring, and a handsome decorative plant. The leaves are very finely cut and so closely crisped or curled as to resemble bunches of moss. Owing to its uniformly fine deep green color and very attractive foliage, this is one of the most popular sorts for both the market and home garden.

DOUBLE CURLED An Excellent variety for garnishing meats.

HAMBURG TURNIP ROOTED Fleshy vegetable roots for soups, etc.



Champion Moss Curled

### PARSNIP

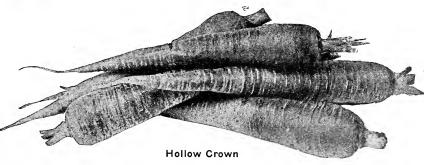
The value of the parsnip as a culinary vegetable is well known but is not generally appreciated at its full value for stock feeding. On favorable soil it yields an immense crop of roots, more nutritious than turnips and very valuable for dairy stock.

Parsnips are usually grown on deep, rich, sandy soil, but will make good roots on any soil which is deep, mellow and moderately rich. Fresh manure is apt to make the roote coarse and ill shaped. As the seed is sometimes slow and uneven in growth, it should be sown as early as possible in drills two and one-half feet apart; cover one-half inch deep and press the soil firmly over the seed. Give frequent cultivation and thin the plants to six inches apart in the row.

HOLLOW CROWN or GUERN-SEY. An excellent variety for the table. The roots are long, with smooth white skin, uniform in shape, tender and of the best quality. The variety is easily distinguished by the leaves growing from the depression on top or crown of the root.

#### LONG SMOOTH WHITE

Will stand the winter without protection. Tender and sweet.



### PRICES

The prices named in the price list are those prevailing on the date of its issue, subject to market fluctuations in value.

As values advance on many items during the season, it will be to your advantage to order early.

### PEPPER

CULTURE For earliest crop sow in hot-bed in February or March and transplant to open ground in May, setting plants about 15 inches apart in rows  $2\frac{1}{2}$  feet apart. Later crops can be sown in cold-frames. Cultivate and keep free of weeds. Peruvian Guano or some good commercial fertilizer applied broadcast around the plant and hoed in when they are about six inches high will produce an enormous increase and improvement in yield.

LARGE RED CHILI Used in flavoring chile-concarne, a dish that is popular in restaurants and homes.

RUBY KING This is the most popular large red pepper now in cultivation. Very large scarlet fruits of sweet, mild flavor. Plants grow two feet high and bear a fine crop of the handsome large fruit, which ripen earlier than any other large fruited variety. The flesh is quite thick, sweet and mild, so mild that if the seeds are removed the fruits may be eaten from the hand like an apple. Especially fine for salads or stuffed for mangoes.

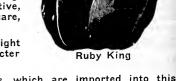
LARGE BELL OR BULL NOSE An old standard and favorite sort. It is early, bright red in color at maturity, entirely mild, of large size and has thick flesh. Is excellent for stuffing. It is a good bearer and is much grown for both home and market.

NEW CHINESE GIANT PEPPER The fruits of this variety are of enormous size, even when put alongside such a large kind as Ruby King. The appearance of the New Chinese Giant on the market is more striking and attractive, and it sells on sight. The shape is more blocky than Ruby King, being almost square, or about the same diameter both ways. Color, brilliant, glossy scarlet.

LONG RED CAYENNE The conical shaped fruits are three to four inches long, of bright red color and borne in great profusion. The flesh in character is very sharp and pungent. A standard household variety of pepper.

SWEET MOUNTAIN Similar to Bull Nose, but larger and milder.

PIMIENTO PEPPERS It grows unusually large and is fiery red, and is as sweet as an apple. You will probably recognize this pepper by the



canned Pimento Peppers, which are imported into this country from Spain.

TABASCO Very hot and fiery fruits one inch in length and vivid scarlet in coloring. This is the true variety from which the famous Tabasco Sauce is made.

### PUMPKINS

SPLENDID FOR PIES AND BAKING OR FOR STOCK FEEDING DURING THE WINTER

CULTURE Pumpkins will grow almost anywhere, but rejoice in rich soil. In many varieties the size and weight depend almost wholly on culture and fertility of the land. Plant in hills 8x8 feet, or drop three or four seeds in every fourth hill in the cornfield. Put seed in ground in May or June. Use a packet to about 5 hills, an ounce for 25 hills; three to four pounds per acre; thin out to 2 or 3 plants to a hill. Ready to use in 65 to 90 days. For winter use, gather before frost and store in a warm, dry place. Fight bugs with Bug Death, Slug Shot or air slacked lime.

KING OF MAMMOTH or GENUINE MAMMOTH. The flesh and skin are of a bright golden yellow. Flesh fine grained and of excellent quality. Notwithstanding its enormous size, it is one of the very best pie pumpkins ever grown, and a splendid keeper. This enormous variety has been grown to weigh over 200 pounds.

TENNESSEE SWEET POTATO

A good variety for making pies and other cooking purposes. It is of medium size, of a creamy white color, and has an excellent flavor; good keeper.

LARGE CHEESE A popular variety in the South. Fruit flattened, the diameter being 2 or 3 times more than the length. Skin mottled light green and yellow, changing to rich cream color as it matures; flesh tender and of excellent quality.

WHITE CUSHAW Crooked neck with a hard, creamy white shell. Thick flesh of excellent quality. Very popular.

GREEN STRIPED CUSHAW Green and white striped, flesh rich yellow, solid, fine grained, very thick and sweet.

IF YOU DO NOT HAVE OUR LATEST PRICE LIST-WRITE US.

#### **PUMPKINS**—Continued

SMALL SUGAR Smaller than the field pumpkin, but finer grained, sweeter, and very prolific; first rate for the table or stock. The best variety for making pies.

JAPANESE PIE The flesh is very thick, nearly solid; the seed cavity being very small in one end of the pumpkin; fine grained, dry and sweet, having much the taste and appearance of sweet potatoes. They ripen early, keep well, and are fine for home use. The seeds have peculiar marks resembling characters of the Chinese alphabet.

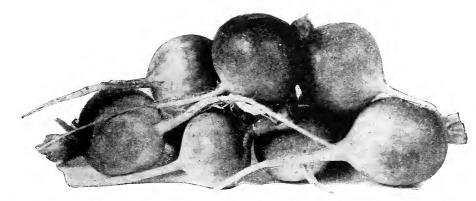
KENTUCKY FIELD A large variety, producing pumpkins in abundance. Has thick meat of fine quality. Very suitable for canner's use. Buy BELL Brand Tested Seeds and Get the Best



### RADISH

For forcing sow in hot-bed or under glass in rich, sandy soil made perfectly level. Scatter evenly over the surface from fifty to one hundred seeds to the square foot and cover with one-half inch of soil sifted on. Careful watering to keep soil moist, even, moderate temperature and good ventilation are required for rapid and best root development. If the bed is a good one the whole crop can be marketed in twenty-one to forty days after planting.

For open ground culture sow in rich, sandy soil as soon in the spring as it is fit to work, in drills twelve to eighteen inches apart and thin out the plants to prevent crowding. A good dressing of nitrate of soda will greatly stimulate growth and insure tender, brittle roots. Successional sowings from one week to ten days apart will keep up a supply. After the hot weather of summer begins, it is better to sow the summer and winter varieties as they do not become tough and stringy nor pithy so quickly as the early sorts.



Radishes are subject to root maggots which make them useless for culinary purposes. We know of no certain remedy for this pest. We have found that the best preventive measures are to avoid the use of rank manure and not to sow on ground where radishes, turnips or cabbages were grown the year previous.

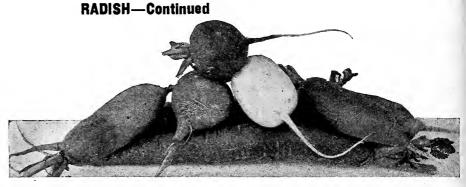
THE NEW PONDEROSA RADISH The Monarch of radishes. Compared with all earliest varieties it looks like an American eagle sitting on a limb with a row of Pee-Wees. Combines earliness with colossal size; growing to four times the size of other varieties, and does not become pithy. Beautiful dark carmine color; globe turnip shaped; flesh firm, juicy and tender. You may sow seed as soon as you can work the ground. Stock is extremely hardy for first outdoor planting as well as forcing, and last of February is not too early to sow. A French production, and our seed of this strain was imported directly from the grower and producer.

EARLY WHITE TURNIP This is an early white radish a little more flattened than Early Scarlet Turnip, and as offered by us, of smaller size and sometimes a little earlier maturing. While used mostly for early outdoor planting, its very small tops and quick growth make it suitable for forcing. The roots are about one inch in diameter when mature. The flesh is pure white, crisp and tender.

CRIMSON GIANT TURNIP
A round radish of exceptionally large size for so early a variety. The roots are nearly globe-shaped, of beautiful crimson-carmine color and most excellent quality, often growing one and three-fourths inches in diameter before becoming pithy. It is a desirable variety for general outdoor planting, and also suitable for forcing where a very large, round radish is wanted. It remains in condition a remarkably long time for so early a radish.

#### EARLY LONG SCARLET, SHORT TOP IMPROVED

This is a standard, most excellent sort either for the home garden or the market. The tops are short and comparatively small. The roots are smooth, slender, uniform in shape and a very attractive bright carminered color. They grow about one-fourth to one-third out of the ground and continue crisp and tender until fully matured, when they are about six inches long.



CINCINNATI MARKET A desirable market variety with roots similar to Early Long Scarlet, Short Top, Improved, but averaging longer, deeper red in color and remaining a little longer in condition for use. The roots are slender and before becoming pithy are often six to seven inches long by about five-eighths of an inch in diameter at the shoulder.

ICICLE A very attractive, pure white radish, the earliest of the long, white summer sorts and of most excellent quality. The roots are somewhat shorter, with smaller tops than Long White Vienna and mature a little earlier. The roots when mature are five to six inches long by about one-half to five-eighths of an inch in diameter. One of the most desirable varieties for outdoor summer planting for the home garden and market. It is also adapted for forcing.

WHITE STRASBURG Even when comparatively small this variety is in good condition for use and continues crisp until matured when the roots are four to six inches long by one and one-half to two inches in diameter. The roots are rather thick at the shoulder and are usually somewhat tapering. They remain in condition for use much longer than the early varieties. This is one of the best large, white later summer sorts for home garden and market.

LONG WHITE VIENNA or LADY FINGER. An early white, summer radish of most excellent quality. The tops are of medium size. The roots are clear white, slender, smooth and average when mature six to seven inches long by about five-eighths to seven-eighths of an inch in diameter at thickest part. The flesh is very crisp and tender. The variety is desirable for market and home garden use.

ST. LOUIS WHITE SUMMER An improved and superior strain of white summer radish which has become the popular favorite not only in St. Louis and vicinity, but on the markets of many other western citics. All who grow it pronounce it the best of its class, both for early and late sowing out of doors. It is attractive in shape, with pure, paper-white skin and flesh—the latter tender, crisp and of agreeable pungent flavor. We heartily recommend it as a first-class sort.

EARLY WHITE GIANT STUTTGART The roots are inches in diameter, white and are usually top shaped. The flesh is white and crisp, and keeps remarkably well, so that those not used in the summer or fall can be stored for early winter use.

EARLY SCARLET TURNIP A round, red, turnip-shaped radish with small tops and of very quick growth, deserving general cultivation on account of its rich, scarlet-red color, almost crimson and its white, crisp and tender flesh. The roots often grow one inch long by one and one-eighth inches in diameter before becoming pithy. This is a standard variety for early outdoor planting for the home garden and market.

EARLY SCARLET TUNIP, WHITE TIPPED One of the best early radishes for the home garden and a great favorite in large markets for early planting outdoors. It is but little later than Early Scarlet Turnip, White Tipped, Forcing and will give entire satisfaction where extreme earliness and small tops are not the chief considerations. The roots are nearly round, slightly flattened on the underside. The color is very bright, deep rose-carmine scarlet with a distinctly white tip. The flesh is white and of the best quality. The stock we offer is exceptionally attractive in its splendid coloring. The scarlet is unusually deep and affords a distinct contrast with the large, clear white tip.

FRENCH BREAKFAST A quick growing, small, olive shaped radish about one and one-half inches long by five-eighths to three-fourths of an inch in diameter when fully grown. The color is beautiful deep rose-scarlet except a little clear white about the tip. This is an excellent variety for planting outdoors for the home garden. Its small tops and earliness make it also desirable for growing under glass.

IMPROVED CHARTIER or SHEPHERD. One of the best long radishes for planting outdoors for early summer use in the home garden, and used also for the market. The tops are of medium size. The roots are in good condition for the table when half an inch thick and continue hard and crisp until they reach a diameter of about one and one-fourth inches, thus affording good roots for a long time. The roots are rather long, averaging seven to eight inches when mature, bright scarlet-rose in color, shading into white at the tip.

#### RADISH—WINTER VARIETIES—Continued

Seed for winter radishes should be sown about the first of August in rich, warm, sandy loam, in rows about twenty inches apart, covering half an inch deep. When well up thin to three inches apart in the row and give frequent cultivation. For winter use, the roots should be pulled and packed in damp sand and stored in a cool cellar.

CHINA ROSE This is an extensively grown variety for fall and winter the roots are cylindrical, or largest near the bottom, stump rooted or blunt at both ends. The skin is smooth and of a bright deep rose color. The flesh is white, firm, crisp and pungent. The tops are moderately large with leaves distinctly cut and divided; leaf-stems tinged with rose. The roots are usually four to five inches long by about one and one-half to two inches in diameter when fully mature, sometimes growing considerably thicker. It is a desirable late maturing garden sort.

ROUND BLACK SPANISH The roots are round, sometimes slightly top shaped, three or four inches in diameter. The skin is almost black. The flesh is white, very compact, decidedly pungent, but well flavored. The variety keeps well through the winter.

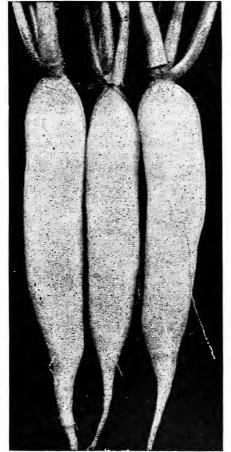
LONG BLACK SPANISH One of the latest and hardiest long garden radishes, especially adapted for winter use. The roots are long, thick, almost black, somewhat wrinkled. The flesh is white, of firm texture, decidedly pungent but well flavored. The roots when mature are usually seven to nine inches long by two to three inches in diameter at thickest part.

### RHUBARB OR PIE PLANT

Rhubarb, also known as Pie Plant, or Wine Plant, is the earliest spring vegetable and is grown for its leaf stalks which are extensively used for pies and sauce.

Rhubarb succeeds best in deep, somewhat retentive soil and the richer this is and the deeper it is stirred, the better. Sow in drills an inch deep and thin out the plants to six inches apart. and deeply stirred soil, setting them four to six feet apart each way and give a dressing of coarse manure every spring. The stalks should not be plucked until the second year. When a blossom stalk appears, it should be cut back well into the ground and the plant never allowed to exhaust itself by running to seed. Our seed is saved from selected plants of the Linnaeus and Victoria, but like the seeds of fruit trees, rhubarb seed cannot

In the fall transplant into very highly manured be relied upon to reproduce the same varieties.



Long Black Spanish

LINNAEUS Early, large and tender.

VICTORIA The most popular variety, later than the preceding. For RHUBARB ROOTS See Page 42.

#### SALSIFY or Vegetable Oyster

One of the most desirable winter vegetables. The roots when cooked are very palatable and nutritious and are served in a variety of ways. The flavor is similar to oysters. Salsify succeeds best in a light, well enriched soil, which should be stirred to a good depth. Coarse and fresh manure should be avoided, as it will surely cause the roots to grow uneven and ill-shaped. Sow early and quite deep, giving the general culture recommended for parsnips. The roots are perfectly hardy and may remain out all winter, but should be dug early in spring, as they deteriorate rapidly after growth commences. Frost does not injure the roots, but before the ground freezes a quantity for winter use may be stored in a pit or in a very cool cellar.

MAMMOTH SANDWICH ISLAND This variety is large and strong growing with long, smooth, white, tapering roots, and is less liable to branch than the other sorts. The tops are grassy. It is invaluable for market gardeners' use.

### SPINACH

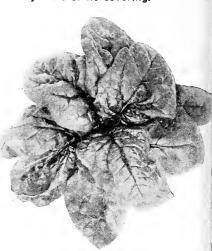
No plant makes more palatable and nutritious greens than spinach when properly prepared. Seed should be planted in very rich ground, the richer the better. Sow in drills sixteen to twenty inches apart and thin to about six inches apart when the leaves are an inch wide. All should be cut before hot weather, while young and tender. For early spring use sow early in autumn and protect the plants with a light covering of leaves or straw, or plant as soon as the land can be worked in the spring. Under favorable conditions the leaves may be large enough for eating in eight weeks. South of St. Louis spinach can be grown through the winter with very little or no covering.

SAVOY LEAVED This sort is known also as Bloomsdale and as Norfolk Savoy Leaved. It is a very early variety and one of the best to plant in autumn for early spring use. The plant is of upright growth, with thick, glossy, dark green leaves of medium size, pointed but quite broad, and crimpled or blistered like those of Savoy cabbage. It is hardy and grows rapidly to a suitable size for use, but runs to seed quickly in warm weather. Seed round. This spinach is suitable for the home garden and is much used by southern truckers.

LONG STANDING An improved round seeded strain of excellent quality, comparatively late in season but after reaching maturity it remains in condition for use much longer than most sorts. The plant is very large, becoming rather procumbent when mature. The leaves are usually very broad arrow-shaped or rounded, comparatively smooth and dark, rich green. This sort is extensively used by market gardeners.

#### VIROFLAY SPINACH

THICK LEAVED.
This new variety has been in great demand, especially among market gardeners, on account of its rapid growth, broad leaves and shipping qualities.



### SQUASH

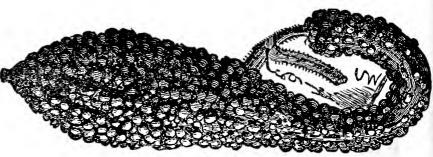
One of the most nutritious and valuable of garden vegetables. The summer varieties come to the table early in the season, while the fall and winter sorts can be had from August until the following spring. The winter varieties are very well adapted for stock feeding and we heartily recommend them for that purpose.

Squash plants are very tender and sensitive to cold and so planting must be delayed until settled warm weather. General methods of culture are same as for cucumbers and melons, but squash is less particular as to soil. Summer varieties should be planted four to six feet apart each way and winter sorts eight to ten. Three plants are sufficient for a hill. In gathering the winter sorts care should be taken not to bruise or break the stem from the squash, as the slightest injury will increase the liability to decay. Winter squashes should be stored in a moderately warm, dry place and the temperature kept as even as possible. For those who desire very early squashes, seed can be planted in boxes, and transplanted. Insect pests that attack the vines when small, such as the striped beetle, may be kept off by frequent dustings with air slaked lime, soot or sifted ashes diluted with fine road earth. For the large squash bug, commonly known as the "stink-bug," the best remedy is a kerosene emulsion.

#### SUMMER VARIETIES

#### MAMMOTH WHITE BUSH SCAL-

LOP An early maturing, somewhat flattened, scalloped bush squash, of largest size and the handsomest of the summer varieties. The fruit is uniformly warted and a beautiful, clear waxy white, instead of the yellowish white so often seen in the old Early White Bush Scallop. The stock we offer of this variety is exceptionally true to type.



Yellow Summer Crookneck Squash

#### SQUASH—Continued

EARLY WHITE BUSH SCALLOP The well known, very early, somewhat flattened, scalloped bush squash of medium size. Color creamy white, surface comparatively smooth. The vines are vigorous and very productive. This variety is also known as Patty Pan or Cymling.

EARLY YELLOW BUSH SCALLOP A very early, somewhat flattened, scalloped bush squash of largest size. Skin deep orange; flesh pale yellow and of very good flavor. We have developed a strain of the old Yellow Bush Scallop

which is fully as productive but uniformly larger and fatter than the old stock and a very small seed cavity. Its superiority is so great that we would be justified by prevailing custom in renaming it.

YELLOW SUMMER CROOKNECK The old standard sort, early and very productive. Matures the bulk of its crop a little earlier than the Mammoth Summer Crookneck. Fruits when fully grown are about one foot long, with uniformly crooked neck and surface densely warted; color bright yellow. Shell very hard when ripe.

#### WINTER SQUASHES

BOSTON MARROW Excellent winter variety, with hard shell of bright orange and deep orange flesh. Fine grained and of good flavor.

HUBBARD The most popular late table variety. Fruits are of oblong shape with attractive olive-green skin which is warted.



Hubbard

### TOBACCO

CULTURE Tobacco in this part of the country should be started in a hot-bed in March and treated same as tomatoes. One ounce makes 5000 plants.

HAVANA The leading smoking variety.

MISSOURI BROAD LEAF A well-known standard sort; very large yielder.

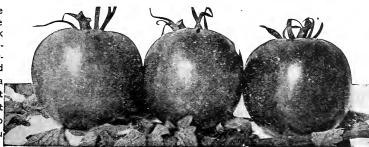
WHITE BURLEY This is especially valuable to manufacturers either of cut or plug tobacco. It is often used for wrappers.

### TOMATOES

Every garden should have an early as well as a main or general crop of tomatoes. Either for market or home use, the idea of growing early tomatoes is to get them as soon as possible and follow up with the main crop, which may be used in many ways and as especially desirable for canning. Do not plant in over-rich soil as it will cause an over-growth of foliage and few fruits.

CULTURE Sow the seed in February or March in a hot-bed, greenhouse or in shallow boxes in the house in rows 4 to 6 inches apart and half an inch deep. When the plants are about 2 inches high transplant to 3-inch pots or into shallow boxes 4 inches apart each way. Transplant in the open ground after all danger of frost is past, 3 to 4 feet apart each way. Cultivate frequently. A packet will produce about 100 plants, an ounce about 3,500 plants, enough for an acre.

RED ROCK is beyond question the best large late red tomato for either home use, nearby market or for canning. Red Rock matures in from 110 to 115 days. It is extraordinarily solid—hence the name of Red Rock. Perfectly smooth, has no superior in texture and flavor and is as red as a tomato can be. It's a red that goes all the way through and the meat is solid, without being hard, and of the finest flavor. Practically no waste tomatoes in a crop of Red Rock. Plant Red Rocks this year. You will like it.



Chalk's Early Jewel

#### TOMATO—Continued

EARLIANA Our strain of this first early sort is earlier and decidedly superior to much that is sold as Sparks' Earliana, and the extreme earliness of its large, smooth fruits make it a very profitable tomato for market gardeners, as well as desirable for the home garden. The vines are small but vigorous and productive. The fruits are bright deep scarlet, medium to large, nearly round and exceptionally smooth for so early a variety. The fruits are borne in clusters near the base of the plant and the bulk of the crop ripens very early.

ACME This well known sort is sold also as Essex Early Hybrid. The vines are large, hardy and productive, ripening their first fruits very early, although not an extra early variety. The fruits are purplish pink, round, smooth and of medium size, free from cracks and stand shipment very well. Acme is also used extensively for the home garden. The flesh is solid and of excellent flavor.

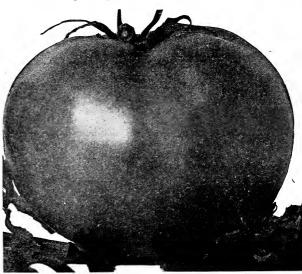
CHALK'S EARLY JEWEL One of the very best early tomatoes yet introduced. The vines are vigorous and very productive. The fruits are bright deep scarlet-red, nearly round or somewhat flattened, smooth, of large size and most excellent quality. They ripen very early and the pickings continue through a long season. It is a most desirable sort for the home garden.

JUNE PINK An extra early, purplish pink tomato similar to the popular scarlet fruited Earliana in growth of vine, shape and size of fruits and time of maturing. A valuable variety for market gardeners who want a very early purplish-pink tomato.

MATCHLESS A main crop variety, very popular in the east. The fruits are very large, smooth and symmetrical, ripening well to stem. The flesh is rich, bright red in color and of fine quality, although possibly not quite as firm as Improved Trophy or Stone.

PERFECTION A medium to large main crop tomato of deep crimson-scarlet color and of good quality. It is much used for the home garden. The vines are large, vigorous and productive. The fruits are nearly round, uniformly smooth and even in size.

IMPROVED TROPHY A very large, midseason or main crop tomato, unsurpassed in rich, deep crimson-scarlet color and of excellent quality. The vines are large, vigorous and exceptionally productive.



FAVORITE (Livingston's). Ripens evenly and early; very prolific, good flavor, few seeds, flesh solid.

McGEE A favorite in many sections of Texas where it originated.

KENTUCKY CARDINAL The Grandest Tomato of 'em all. A thing of beauty that beggars description. Surpasses every tomato yet produced in all the important essentials.

The Kentucky Cardinal stands alone, being in every sense an early, medium, late and main crop tomato. It bears tomatoes until killed by frost. You will need no other. The finest slicing tomato in existence. Slices often the size of a dinner plate.

Wonderfully prolific, deep cardinal-red color from blossom to stem, perfectly round and smooth as satin. Free from specks and imperfections common to other sorts and so vigorous, compact and healthy that it resists drought or wet periods in succession. Sow seeds in hot-beds or indoors during February, using a mixture in equal parts of soil, sawdust, sand and fertilizer. Plant in open ground about May 1st.

LIVINGSTON'S GLOBE A large, purplish pink, globe-shaped or very nearly round tomato of excellent quality. It is extensively used for shipping. The vines are very vigorous and productive. The fruits are rather uneven in size, but are very smooth, and mature a little earlier than most midseason or main crop varieties.

BEAUTY The vines are large, vigorous and very productive. The fruits are large, purplish pink, exceptionally smooth and uniform in size, very solid and of excellent quality. This is one of the best midseason or main crop purplish pink sorts for table use.

PONDEROSA A purplish pink, main crop tomato of the largest size. The vines are vigorous and very productive. The fruits are very solid, with exceptionally few seeds, fairly smooth and considered of very good quality, especially by those who prefer a tomato quite free from acid. It is very desirable for slicing.

#### TOMATO—Continued

STONE One of the largest and most solid, main crop or late, bright red varieties. It is unsurpassed for slicing and canning. The vines are large, vigorous and very productive. The fruits are bright deep scarlet, oval and very deep, exceptionally smooth and uniform in size. Our stock is distinctly superior to most of that offered under this name, being larger, smoother, more uniform and better colored.

CORELESS This is a very large, uniformly globeshaped, bright scarlet, late maturing tomato. The fruits are very solid, almost entirely free from green core an dwith little or no depression at stem end, making the variety desirable for slicing, canning and shipping. The vines are very vigorous, blight resistant and productive.

DWARF STONE The vines are dwarf, but vigorous and productive. Although an intermediate or rather late maturing variety, the fruits are of good color, being an attractive bright red, exceedingly smooth and very solid. It is a desirable sort for the home garden. We consider this the best of the large fruited dwarf tomatoes.

DWARF CHAMPION This is sometimes sold as the "Tree Tomato." It is a second early or main crop, purplish pink variety, especially desirable where garden space is limited. The vines are about two feet high, vigorous, upright and compact. The fruits are medium sized, exceptionally smooth and of very good quality.

GOLDEN QUEEN The fruits are large and smooth, of bright golden yellow color, sometimes with a slight blush of red. They are as smooth and well shaped as the best of the red varieties and are of superior flavor.

RED PEAR Used for preserves and to make "tomato figs." Fruits bright red, distinctly pear-shaped and of excellent flavor. Our stock is the true small pear-shaped.

YELLOW PEAR Fruits similar to the Red Pear, but of rich, clear, yellow color and quite distinct from the variety sometimes sold under this name.

YELLOW PLUM Fruits plum-shaped, of clear, deep yellow color; flesh yellow and finely flavored. Esteemed for preserves.

### TURNIP

The value of turnips and rutabagas for feeding stock in fall and winter is not fully appreciated, as they are much liked by all kinds of stock and serve to keep them in good condition. They should not be fed, however, in large quantities to milch cows, or the flavor of the milk will be disagreeably affected. We earnestly recommend that farmers increase their sowings largely, for we are sure the crop will prove remunerative.

Both of these wholesome vegetables are very easily affected in their form and flavor by soil, climate, and mode of culture. There are a great many varieties, but our list comprises the best for the garden and farm.

For summer use sow early in spring in light, rich or new soil, in drills one and one-half to two feet apart, according to the size of the variety, and cover one-half inch deep, or sow broadcast, but in either case be sure to have the ground rich and freshly stirred. Thin early and keep free from weeds, so that the young plants will not be checked

in growth. Any overcrowding will result in rough and poorly flavored roots. It is important to get the spring and summer crop started very early, so that the turnips may have time to grow to sufficient size before hot weather causes them to become tough and bitter.

In the middle and western states sow for fall and main crop the middle of June to the first of August and in the manner given for spring sowing. In the field turnips are often sown broadcast, though in most cases better results are obtained by drill culture; good results from broadcast sowing are often obtained on new or burned over land where the weeds are not likely to be troublesome.

For winter keeping store the turnips in a cool cellar and cover with sand or turf to keep them fresh. Another method is to put them in a pit dug in dry soil, where there will be no danger of water standing, and to cover with straw overlaid with earth sufficiently deep to keep out frost. Thus protected turnips will keep well till spring.

EXTRA EARLY WHITE MILAN Variety remarkably early. Tops very small, upright and compact, so that rows can be planted close together. Roots clear white, very smooth, flat, and are of best quality when only about two inches in diameter. Flesh clear white, sweet and tender. Very desirable for early use.

EXTRA EARLY PURPLE TOP MILAN Similar to Extra Early White Milan, except that the roots are a little flatter and an attractive purple-red on the upper portion. All in all, the Milan turnips leave nothing more to be desired in the way of an extra early garden turnip.

WHITE EGG An early, oval or egg-shaped variety, with smooth, clear white roots of medium size, which grow half out of the ground. The tops are small, with leaves distinctly out. The flesh is clear white, firm, fine grained and sweet. The roots when in best condition for use are usually about two inches in diameter and about three and one-half inches long.



Extra Early White Milan

#### **TURNIP—Continued**

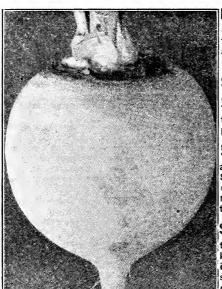
EARLY PURPLE TOP, STRAP LEAVED A very early, strap leaved variety, very extensively used for the table. The leaves are few, entire, upright in growth. The roots are flat, of medium size, purple or dark red above ground, white below. The flesh is white, fine grained and tender. The roots when in best condition for table use are about two and one-half inches in diameter, but can be grown much larger for stock feeding. Also known as Early Red Top, Strap Leaved.

#### EARLY WHITE FLAT DUTCH, STRAP LEAVED

A very early, white turnip, extensively used for the table, especially in the southern states. The leaves are entire and upright in growth. The roots are of medium size flat, very white fleshed, fine grained and sweet. The roots when in best condition for table use are about two and one-half inches in diameter. This variety is also grown as a field crop.

PURPLE TOP WHITE GLOBE This excellent table variety is globular in shape, of good size and very attractive in appearance. The roots are large, purple or dark red above ground, white below. The flesh is white, fine grained and tender. The roots when in best condition for the table are about three inches in diameter, but can be grown much larger for stock feeding. This sort keeps well for so early a variety and is one of the best for market use. Sometimes known as Rep Top White Globe.

COW HORN, OR LONG WHITE This variety is clear white, except a little shade of green at the top of the root, which is long and carrot-like in form, slightly crooked and grows nearly half out of the ground. The flesh is fine grained and well flavored, and for table use is in best condition when the roots are about two inches in diameter. Desirable for stock feeding and has obtained considerable favor as a market sort. The variety is of very rapid growth and well adapted for fall and early winter use.



Purple Top White Globe

### POMERANEAN WHITE GLOBE One of the most productive kinds and in good, rich soil the roots will frequently

grow to twelve pounds in weight. The roots are globe-shaped or slightly flattened; skin very white and smooth. This sort is used for stock feeding and is also good for table use if pulled when the roots are not more than four to five inches in diameter. Where the winters are mild the tops are used for greens.

SEVEN TOP This sort is cultivated extensively in the south for the tops, which are used for greens. In many sections it is a favorite green feed for stock, and its use, like rape, for a pasture crop, is quite general. This sort is very hardy and the growth usually continues throughout the winter. The variety is not generally depended on for the root since the tops are produced so abundantly.

SOUTHERN PRIZE Superior to Seven Top, as usually sold and extensively grown in the South, where the tops furnish an abundance of cuttings. These are valued highly for salad or greens. The roots of Southern Prize are valuable as well as the tops, being remarkably large, symmetrical and excellent for feeding stock. A favorite for forage in the Virginlas and Carolinas, where it usually thrives throughout the winter without protection.

SWEET GERMAN An excellent smooth-leaved, medium-large white fleshed Swedish turnip sort that requires a long season for maturing, and should be sown a month earlier than the flat turnips, but can be kept in good condition well into the winter. The roots are somewhat globular in shape, bronze-green above ground, white below, remarkably solid in texture, sweet and of very good quality. The leaves are entire and rather small for size of root. The roots are in best condition for table use when four to five inches in diameter, but can be grown much larger for stock feeding. A sharp leaved sort; also sold as Sweet German Rutabaga.

#### YELLOW FLESHED VARIETIES

LARGE AMBER GLOBE One of the best yellow fleshed varieties, grown usually for stock feeding. The roots are of large size and of globular shape. The skin is clear yellow except the top, which is tinged with green. The flesh is light yellow, fine grained and sweet. The variety keeps well and is a good cropper. YELLOW GLOBE A Round, smooth light yellow turnip of medium size. The flesh is crisp, firm and of very good quality for the table or for stock feeding. The roots are in best condition for table use when three to four inches in diameter. This sort keeps well and is a good cropper.

ORANGE JELLY OR GOLDEN BALL a distinct variety, one of the most delicately flavored of the yellow fleshed turnips. The tops are small. The roots are medium sized, round, very smooth and with deeper yellow skin than most of this class. The flesh is firm, crisp and of most excellent quality. The roots are in best condition for table use when about three inches in diameter This variety is of quick growth adapted to spring as well as fall planting, and keeps exceptionally well. Known also as Robertson's Golden Ball.

#### TURNIP—Continued

# PURPLE TOP YELLOW ABERDEEN A medium sized, round, late maturing, long keeping, yellow fleshed turnip. Roots yellow, with purple top. Flesh pale yellow and of very firm texture, approaching the rutabaga in this regard, but tender and sweet. Since it requires a longer time to mature the seed should be sown about two weeks earlier than most sorts. It is hardy, productive and valuable for

#### **RUTA-BAGAS**

SWEDISH OR RUSSIAN TURNIP

AMERICAN PURPLE TOP For years a great yielder and unsurpassed for stock feed. Tops small, bulbs very large, sweet and of the richest flavor.

### ONION SETS FOR SPRING PLANTING



stock feeding

Grown from Sets

RED BOTTOM Produced by sowing thickly the seed of the large Red Wethersfield variety, and thinning out. They mature under this method when about half on inch through. They are used precisely as top onions, and set them out in the spring instead of sowing seed.

YELLOW BOTTOM Identical with the preceding except in color. They are used in the same manner and are produced from the seeds of the Yellow Danvers variety.

WHITE BOTTOM The seed of the White Silver Skin or White Portugal variety is used to produce white sets. They do not keep as well as the red or yellow, but produce beautiful white onions early in the season.

RED TOP OR BUTTON Produce no seed, but instead a small number of bulbs or onions about the size of acorns on top of the stock. These little bulbs are used instead of seed, and will produce a large onion, maturing much earlier than from the seed.

The large onion produces the top onion and the little top onion produces the larger onion.

FOR FALL PLANTING

CRYSTAL WHITE WAX This is a beautiful crystal onion; also gives splendid results if planted during the fall and winter months. It is especially desirable for table use on account of its mild flavor.

WHITE OR YELLOW BERMUDA This variety is very popular for winter planting and is one of the mildest onions grown. Many carloads of this variety are grown every year for the Northern market. By planting sets onions are ready for the market about six weeks to two months earlier than from the seed. It requires from eight to ten bushels to plant an acre.

### **GARLIC SETS**

A bulbous root of the onion type, having a strong penetrating odor, and flavor much esteemed for flavoring soups, stews, etc.

USED FOR FLAVORING

WHITE PEARL This variety is very mild and sweet and is especially adapted for fall and winter planting. It is a mild onion, growing to an extra size, and is grown very extensively by gardeners for the market.

CULTURE The bulbs (sets), are composed of several parts, which should be divided and planted in rows one to three feet apart, six inches apart in the rows, and one inch deep. When the tops turn yellow take up and dry in the shade.

### MISCELLANEOUS ROOTS

#### JERUSALEM ARTICHOKES

This variety is grown for its tubers, which somewhat resemble the potato in appearance, but are different in flavor. It is used as a vegetable and for feeding cows, sheep and hogs. It is a productive and profitable food. Plant in rows four feet apart and cultivate the same as potatoes.

#### WILD RICE

An annual which sows itself in the fall, about the middle of September, and lies dormant all winter. In spring it commences to sprout as the water gets warm, reaching the surface during the first half of June. It grows very rapidly in one to eight feet of water.

#### MISCELLANEOUS ROOTS—Continued

#### HORSE RADISH ROOTS

The best horseradish is produced from small pieces of roots six or eight inches in length. These small roots will produce good radish fit for use in one season's growth. Plant the set small end down, so that the top will be two inches under the soil. The soil should be very rich and well cultivated. It is hardy, and may be left in the ground until spring before digging.

#### CHIVES

Chives are perfectly hardy perennial members of the onion type, and are grown exclusively for their tops, which are used wherever the flavor of onion is required. Planted in small slumps in any common garden soil they will grow readily and in time increase so as to render a division necessary. The tops appear very early in spring, and can be shorn throughout the season as needed.

#### RHUBARB

These may be planted early in the spring or in fall, setting the roots three feet apart each way. It requires but little labor to plant, and when once planted in good, rich soil it will remain in bearing condition many years.

#### CHICORY, LONG ROOTED, OR COFFEE

Sown in drills the roots become well developed. When they are dried, roasted or ground they become the Chicory of commerce, and are used in adulterating coffee.

#### DANDELION

Cultivated for spring greens and for salad. Sow in May or June in drills half an inch deep and twelve inches apart.

LARGE THICK LEAVED. Cultivated.

### **VEGETABLE PLANTS**

WE CAN SUPPLY THE FOLLOWING VEGETABLE PLANTS IN SEASON

CABBAGE

**CAULIFLOWER** 

TOMATO

PEPPER

SWEET POTATO SLIPS

### AROMATIC, MEDICINAL AND POT HERBS

Most of the varieties of herbs thrive best on sandy soil and some are stronger and better flavored when grown on that which is rather poor. In all cases the soil should be carefully prepared and well cultivated, as the young plants are for the most part delicate and easily choked out by weeds.

Sow as early as the ground can be made ready in drills sixteen to eighteen inches apart, taking pains that the soil is fine and pressed firmly over the seed, or they may be planted as a second crop—the seeds sown in beds in April and the plants set out in June. Most of them should be cut when in bloom, wilted in the sun and thoroughly dried in the shade.

ANISE (Pimpinella Anisum). An annual herb cultivated principally for its seeds, which have a fragrant, agreeable small and a pleasant taste; used medicinally for aromatic cordials, colic and naseau. The leaves are sometimes used for garnishing and flavoring. Plant of slender upright growth with deeply cut foliage; flowers small, yellowish white, borne in large, loose umbels.

BALM (Melissa officinalis). A perennial herb, easily propagated by division of the root or from seed. The leaves have a fragrant odor, similar to lemons, and are used for making balm tea for use in fevers and a pleasant beverage called balm wine. Plant one to two feet high, hairy, losely branched with ovate leaves; flowers white or pale yellow in loose axillary clusters.

BASIL, SWEET (Ocimum Basilicum). A hardy, aromatic annual. The seeds and stems have a strong flavor and are used in soups and sauces. Plant about 18 inches high, branching, with ovate toothed leaves; flowers white or bluish white in leafy terminal racemes or spikes.

BORAGE (Borago officinalis). A hardy annual used as a pot herb and for bee pasturage. The bruised leaves immersed in water give it an agreeable flavor and are sometimes used in salads to give a cucumber-like taste. Plant of coarse growth, hairy, with large oval leaves; flowers blue or purplish in racemes.

CARAWAY (Carum Carui). A well-known herb, cultivated for its seeds, which are used in confectionery, cakes, etc. The leaves are sometimes used in soups, for flavoring liquors and for colic in children. Plant one and one-half to two feet high, with finely cut foliage and clusters of small, white flowers. Plants never seed till the second year.

CORIANDER (Coriandrum Sativum). A hardy annual cultivated for its seed, which has an agreeable taste, and is used in confectionery and to disguise the taste of medicine. Gather on a dry day, bruising the stems and leaves as little as possible, for when injured they have a disagreeable odor which they impart to the seed. Plant slender, two to two and one-half feet high, strong smelling, with smooth, finely cut foliage and small white flowers.

DILL (Anethum Graveolens). An annual of aromatic odor and warm pungent taste. Its seeds are used for seasoning. It possesses medicinal properties, but its largest use is for making dill pickles. Plant branching, two to three feet high; leaves very much cut into thread-like segments; flowers small, yellowish, borne in umbels. Seed flat.

FENNEL, SWEET (Foeniculum officinale). A hardy perennial. The seeds of this aromatic herb have a pleasant taste, and are sometimes used in confectionery; also in various medicinal preparations. The young shoots are sometimes eaten raw and are used in salads, soups and fish sauces. Plant very branching, two to four feet high, with dense thread-like foliage; flowers light yellow in large, loose umbers. Seed oval.

#### AROMATIC, MEDICINAL AND POT HERBS-Continued

HOREHOUND (Marrublum Vulgare). A perennial herb with an aromatic odor and a bitter, pungent taste. It is a tonic and enters largely into the composition of cough syrups and lozenges. Laxative in large doses. Will thrive in any soil, but is stronger if grown on light, poor land. Plant spreading, one to two feet high; leaves ovate, roughened, covered with whitish down; flowers small, white, borne at axils of leaves.

HYSSOP (Hyssopus Officinalis). A hardy perennial with an aromatic odor and a warm-pungent taste. It is a stimulant, expectorant and mild tonic. The flowering summits and leaves are the parts used. It does best on dry, sandy soil. Plant upright, with narrow, glossy dark green leaves; flowers small, borne in whorled spikes, blue, sometimes white or pink.

LAVENDER (Lavendulu Spica). A hardy perennial, growing about 2 feet high. It is used for the distillation of lavender water or dried and used to perfume linen. It should be picked before it becomes dry and hard, and dried quickly. The seed is of rather slow and uncertain germination. Plant erect, with slender grayish green leaves and small violet-blue flowers.

MARJORAM, SWEET (Origanum Marjorana). An aromatic herb for seasoning. The young, tender tops and leaves are used green in summer to flavor broths, dressings, etc., and are also dried for winter use. Usually grows as an annual, as it is not hardy enough to endure the winter of the northern states. Plant erect, but branching, with small oval grayish green leaves and small purplish or whitish flowers.

ROSEMARY (Rosmarinus Officinalis). A hardy perennial, with fragrant odor and a warm bitter taste. The leaves are used for flavoring meats and soups, and for medicinal drinks. Plant erect, branching with small, slender leaves and small light blue flowers. The blossoms form the principal ingredient in the distillation of toilet waters. Plants do not reach a size suitable for use until the second season.

RUE (Ruta Graveolens). A hardy perennial with a peculiar, unpleasant smell. The leaves are bitter and so acrid as to blister the skin. It is a stimulant and antispasmodic, but must be used with great caution, as its use sometimes

results in serious injury. It must not be suffered to run to seed, and does best on poor soil. Plant one and one-half to two feet high, becoming woody at the base; leaves much divided; flowers yellow.

SAFFRON (Carthamus Tinctorius). A hardy annual. Cultivated for its flowers, which are used principally for coloring, sometimes for flavoring and to make the cosmetic powder called rouge. The flowers should be picked while in full bloom. Plant upright in growth, one to three feet high; leaves ovate, prickly; flower-heads yellow, thistle-like.

SAGE (Salvia Offcinalis). One of the most extensively used herbs for seasoning. It is also believed to possess medicinal properties. Hardy perennial, about fifteen to eighteen inches high. Plant very branching; flowers usually blue, sometimes pink or white; leaves grayish green, oval, wrinkled. Cut the leaves and tender shoots just as the plant is coming into flower and dry quickly in the shade. The plants will survive the winter and may be divided. If this is done they will give a second crop superior in quality.

SAVORY, SUMMER (Satureia Hortensis). A hardy aromatic annual twelve to fifteen inches high, the dried stems, leaves and flowers of which are extensively used for seasoning, especially in dressings and soups. Plant erect, branching; leaves small, narrow; flowers small, purple, pink or white, borne in short spikes.

THYME (Thymus Vulgaris). An aromatic perennial herb, eight to ten inches high, used principally for seasoning. Plant very branching, with wiry foliage and small liac flowers. Sometimes the leaves are used to make a tea for the purpose of relieving nervous headache. Sow as early as the ground will permit.

WORMWOOD (Artemisia Absinthium). A perennial plant of fragrant and spicy odor, but with intensely bitter taste. The leaves are used as a tonic, vermifuge and as a dressing for fresh bruises. Plant erect, two to three feet high, with much divided leaves and loose clusters of small, light yellow flowers. It may be raised from seed, propogating by cuttings or dividing the roots. A dry, poor soil is best adapted to bring out the peculiar virtues of this plant.

### FLOWER SEEDS

To grow flowers well the soil must be as carefully prepared as for vegetables. Spade the beds to a depth of at least eighteen inches and make them rich with well-rotted manure, thoroughly mixed in. A small quantity of sand will greatly improve stiff, heavy clay. Don't bury your seeds. Plant the largest, like nasturtiums, not more than an inch deep, balsams half an inch, asters a quarter of an inch, petunias, poppies, etc., on the surface. Firm the soil over the seeds with a board and keep it constantly moist. Don't allow seedlings to crowd each other. Transplant in cloudy weather, or in the evening and shade from the sun a day or two. Give each plant plenty of room. Keep the surface loose, breaking it up after every hard dashing rain, or heavy watering. Cover the beds during summer with a mulch two inches deep, of grass clippings or rotted manure. Stake neatly all weak-stemmed or straggling plants. Never let seed form, and remember that the more flowers you cut the more you will have. If these simple rules are learned by heart, and strictly followed, entire success is certain.

#### **AGERATUM**

Seeds of the above varieties mixed.

#### ALYSSUM

Popular little plants for edging or massing, blooming profusely all summer. Will also do well in the house in winter.

ALYSSUM, LITTLE GEM. A beautiful white variety of Sweet Alyssum, especially adapted to edgings, borders and rock work. The plants grow about six inches high and produce hundreds of flowers, which form a compact mass of bloom about fifteen to eighteen inches in diameter. Hardy annual. Packet, 5 cents.

#### **AMARANTHUS**

These plants afford brilliant contrasts of color, being useful for tall borders and groups; also where foliage effects are desired. The leaves and stems are of different shades of red, blended with green; two to three feet high.

MIXED VARIETIES. Rose, blood-red and yellow.

#### ANTIRRHINUM

(SNAP-DRAGON).—Half-hardy perennials of great beauty, flowering freely the first year from seed. Grow from two to three feet high and flourish in any soil.

LARGE FLOWERING MIXED. Many gay colors.

#### COLUMBINE

DOUBLE MIXED.—Best and finest colors, including white, shades of blue and brownish purple.

#### **ASTERS**

Sow seed indoors or under glass during February and early March, and they will bloom in July, before the season of blight and blister beetles. For fall blooming plant the seed in a specially prepared bed the last week in May. Transplant asters twice. It makes them healthy and vigorous. Keep the soil as cool as possible in mid-summer by mulching, and give plenty of water. Set the plants from ten to fifteen inches apart.

TRUFFAUT'S PAEONY-FLOWERED. The plants are about two feet high and produce large, perfectly formed and brilliantly colored flowers, with petals curving upward and inward, forming

blooms of great beauty. Mixed.

GLOBE-FLOWERED. All the best colors mixed.

OSTRICH PLUME. They branch out freely into well-formed bushes, each plant bearing from twenty-five to forty magnificent flowers. Colors: Mixed.

#### BALSAM

Known as lady slipper and touch-me-not. Balsams have been so much improved by cultivation that, with good seed and proper care a single flower is the exception, each blossom being fully as double as a rose.

DOUBLE MIXED. White, rose, pink, scarlet, etc.

#### CALLIOPSIS, OR COREOPSIS

Very showy border plants, producing in great profusion and for a long time flowers which are bright yellow and rich brown, either self-colored or with these colors and red contrasted.

GOLDEN, YELLOW AND CRIMSON MIXED.

#### CANDYTUFT

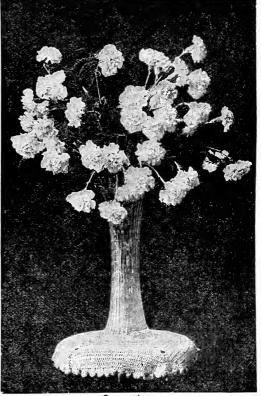
Showy, branching plants six to eighteen inches high. indispensable for cutting and very effective in beds or masses. If sown in spring will bloom from July to September, or if in the fall will blossom from May to July. Hardy annual.

EMPRESS. A complete mass of snowy-white flowers. MIXED COLORS. White, carmine, crimson, etc.

CANTERBURY BELLS. Well known favorite; are flowers of varied colors; July; two to three feet.

#### CASTOR BEAN

(Ricinus). Tall majestic plants for lawn, with leaves of glossy green, brown or bronzed metallic hue and long spikes of scarlet, or of green, prickly fruit. Of very quick growth in rich soil. Tender annual; six to fifteen feet high.



Carnations

ZANZIBARIENSIS. A comparatively new species of wonderfully vigorous growth. Plants grow from ten to fifteen feet high. Leaves with a brilliant lustre, measure about thirty inches across, and in different plants range from bright green stems to deep bronze with dark red stains.

LARGE CHOICE MIXED. Very showy.

#### CENTAUREA

The Centaureas are an exceedingly interesting genus of plants, embracing annuals, biennials and perennials, which though botanically alike, are very different in appearance. Some are very valuable for the beauty of their silvery white, velvet-like foliage; others are highly prized for the beauty of their flowers. They are easily grown from the seed.

CENTAUREA CYANUS. All colors mixed.

#### CHRYSANTHEMUM

The annual Chrysanthemums grow easily from seed and bloom freely during the summer and fall. They should be given plenty of moisture and as cool a location as possible. The flowers are single, daisy-like and of many bright colors.

SUMMER VARIETIES. All the best kinds.

#### CARNATION MARGUERITE

These lovely fragrant carnations produce fine double flowers. Seed may be sown thinly in shallow rows in the garden early in the spring, and the plants will begin to bloom in about four months. When well started the young plants should be transplanted to stand twelve inches apart. They are quite hardy, flowering the first season until late in the fall.

CARNATION. Marguerite, double mixed. All colors. COCKSCOMB

(CELOSIA CRISTATA). A class of plants having colored foliage, and in which the innumerable small flowers and seed vessels, together with the supports, form a very brilliantly colored mass, sometimes gracefully arranged like plumes and sometimes more dense, being corrugated and frilled at the edge like a cock's comb. They form the gayest possible decoration, retaining their brilliant coloring for a long time after being cut. Very commonly grown out of doors, but also adapted for the greenhouse or conservatory. Half hardy annuals. Plant in light, rich soil, and give plenty of moisture.

DWARF VARIÉTIES. Scarlets, crimson, etc.

#### COSMOS

Beautiful and extremely graceful autumn blooming plants, with finely cut foliage. They are fairly loaded with large, nodding white, pink or crimson flowers from mid-September until killing frost. They should be started as early as possible. When a foot high the tops should be pinched out to induce a bushy growth and the branches should be kept pinched back until the buds begin to form. This will largely increase the blooming surface. They should be given some support to prevent being blown over by high winds.

MAMMOTH. Finest mixed, white, pink, crimson, etc. DOUBLE MIXED. Shades of rose and white.

#### DAISY

DAISY, SHASTA DAISY. A fine perennial plant, bearing large white single blossoms, with yellow centers. Soak seed in warm water over night before sowing.

#### DIANTHUS

One of the most popular flowers in cultivation, of a wide variety of colors and very profuse and continuous bloomers. Seed may be sown out of doors as soon as danger from frost is over, and in a few weeks the plants will be a mass of flowers.

CHINESE DOUBLE. Numerous colors mixed. HEDDEWEGII. Mixed colors from choice sorts.

#### ESCHSCHOLTZIA

(CALIFORNIA POPPY). The state flower of California. A genus of the poppy family, fully as valuable as the common poppy for garden ornamentation, as it blossoms almost continually throughout the season. A bed of these in full bloom is most handsome and beautiful in color. Hardy annuals. Height one foot.
MIXED COLORS. White, yellow and orange.

#### FOX GLOVE

(DIGITALIS)

GLOXINIAEFLORA. This is a fine strain of the ordinary foxglove, with handsome gloxiana-like flowers on long spikes. Mixed. H. P.

#### GAILLARDIA

(BLANKET FLOWER). Remarkable for the profusion, size and brilliancy of the flowers, which bloom till frost. Sow seed early in spring in shallow rows and thin out to stand ten inches apart.

FINE MIXED. Orange, crimson and variegated.

#### HELIANTHUS

GOLDEN BALL SUNFLOWER. A tall plant growing seven feet high and blooming profusely all summer. Flowers are double, large, round, golden yellow and resemble chrysanthemums.

LARGE RUSSIAN. This variety forms very strong, heavy stems about six feet high, which are sometimes used for fuel. It produces single flowers which often measure eighteen to twenty inches across, and the large seed is used for making oil and for chicken feed.

#### KOCHIA

#### (BURNING BUSH)

Forms regular pyramids from two to three feet in height, having a cypress-like appearance. Autumn coloring has given it another name, "Mexican Fire Plant." Plants do best in a sunny exposure about two feet apart. H. A.

#### HELICHRYSUM

#### STRAW FLOWER

Bright and attractive summer blooming annuals of free growth, producina and abundance large double red, white and yellow flowers, valuable as an "Everlasting."

92. MOÑSTROSUM. Large Flowering Double Mixed.

#### HOLLYHOCK

Blossoms second season from seed. Our strain of Double Alle-Fringed aheny duces mammoth flowers of a crimpled, silktexture. like fringed and cut edges. ranging from a lovely shrimp pink to deep red in color. is not The subject to rust. hollyhock loves deep, rich, moist ground, but will grow and bloom in almost any soil. Hardy perennial; five hiah.

ALLEGHENY HOL-LYHOCKS. The best colors.



Allegheny Hollyhock

#### LARKSPUR

(DELPHINIUM). The larkspur is one of the handsomest and most useful of plants, and for large gardens is invaluable.

DOUBLE DWARF ROCKET, MIXED. Produces beautiful spikes of double flowers in many shades. Hardy annual: one foot high.

TALL BRANCHING. A splendid mixture.

#### **LOBELIA**

A most elegant and useful genus of plants of easy culture and well adapted for bedding, pots or rockeries. They make a neat edging for beds of white flowers, and are very effective in masses, being always completely covered with flowers.

ERINUS ERECTA. Blue and white mixed.

#### **MYOSOTIS**

(FORGET-ME-NOT). A favorite old-fashioned flower, bearing in profusion clusters of blue blossoms. It thrives well in the share or open border. Hardy, perennial.

well in the share or open border. Hardy, perennial. 34—ALPESTRIS. Plant of compact, bushy habit, with finely cut foliage; six to eight inches high; flowers large, blue.

#### MARIGOLD

Succeeds best in light soil, with full exposure to the sun. The French sorts are fine for edging or bedding, because of their thin, dwarf, compact growth. The African varieties are better for cutting. Sow seed in the open ground and thin to one foot apart. Hardy annuals; in bloom till frost comes.

AFRICAN, TALL MIXED. Numerous colors. FRENCH DWARF MIXED. Yellow to deep red.

#### MARVEL OF PERU

(FOUR O'CLOCKS). The plants are large, and each needs three or four feet of space each way for its best development. The flowers are funnel shaped, white, red, yellow or striped with these colors, and open about 4 o'clock in the afternoon and remain open all night and generally perish before noon the next day.

MIXED COLORS. Yellow, red, striped, etc.

#### MIGNONETTE

(RESEDA). A well-known hardy annual, producing dense spikes of exceedingly fragrant flowers. If sown at intervals in spring and early summer it will bloom until killed by frost. Seed sown in autumn will bloom early in spring. Thrives best in cool temperature, Hardy annual; one foot high.

GIANT PRAMIDALIS. Slender spikes. Fragrant. LARGE FLOWERING. The common sweet.

#### NIGELLA

(Love in a Mist or Devil in the Bush)
A compact free-flowering plant with foliage, curious looking flowers and seed pods; of easy culture, growing in any garden soil; hardy annuals; blue and white mixed; one foot. H. A.

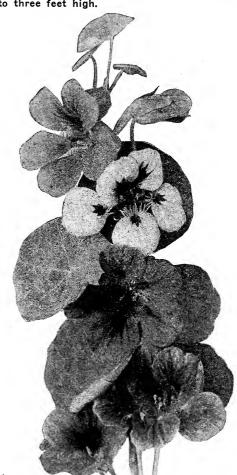
DAMASCENA. The finest Nigella.

#### **NICOTIANA**

(Ornamental Tobacco)

A beautiful hardy annual, fine for its sweet-scented flowers and ornamental leaves. H. A.

AFFINIS. An annual with sweet-scented, pure white star-shaped flowers, 3 inches across, blooming continually. Two to three feet high.



Nasturtium-Superb Mixture

#### **PORTULACA**

There are few flowers in cultivation that make such a dazzling display of color in the bright sunshine as a bed of portulacas. They are in bloom from about the first of July till killed by frost in autumn. The seed requires a moderately high temperature for germination, and should not be sown until settled warm weather.

SINGLE MIXED. Red, white, yellow, etc. DOUBLE FINE MIXED. Most come true.

#### NASTURTIUM

(TROPAEOLUM). No annual has more points of merit or is more widely popular. Insect and disease proof. Nasturtiums flourish in any kind of soil and in any location. Sow the seed where the plants are to remain, as they do not bear transplanting well. Thin them whenever they become crowded, never allowing them to touch each other at any stage of growth. It is also important that moisture should not stand about the roots; therefore, in damp locations drainage should be provided or the plants set in ridges of earth. The advice frequently given to grow nasturtiums in poor soil is a mistake. They fully appreciate good garden loam and will respond by furnishing much larger and finer flowers.

DWARF VARIETIES, MIXED. A bed of dwarf nasturtiums in the yard is very brilliant and attractive, blooming all the season. Hardy annual; about one foot high.

TALL MIXED. Selected from the largest flowers. Fine for covering arbors, trellises and rustic work. Half hardy annual; about eight feet high.

#### **PETUNIAS**

Few plants equal the Petunia for effective display. It begins flowering early and continues a mass of bloom until killed by frost. The seed, which is very fine, should be sown early, merely scattering it on the surface of the seed bed and shading until it germinates. The weakest seedlings usually give the richest colored flowers. Give petunias good, rich garden soil and a sunny location. The flowers have a wide range of color and some are deliciously fragrant.

HYBRIDA MIXED. The best bedding kinds.

DOUBLE LARGE-FLOWERING FRINGED, MIXED. The grandest strain of petunias. Flowers of immense size and variety.

#### PANSY

Pansies do best and produce the largest and finest flowers in cool, moist weather. The seed should therefore be sown either in the early fall out of doors, or during February, in the house, for spring blooming. If sown outside in April, and the plants carried through the summer in a shady place a rich autumn display will result. The secret of success with pansies is to give them the richest possible soil and to never permit the soil to become dry for a moment. We offer choice of three superior mixtures: Fine Mixed, including all the different varieties; Rainbow Mixture, including all shades, white to deepest blue and black, and prepared specially for bedding; Large Flowering Mixed, an extra fine strain selected with the greatest care from the largest and finest flowers only.

FINE MIXED. A great variety of colors.

TRIMARDEAU GIANT, MIXED. Extra large flowers, but not of such perfect form as the Imperial German. Most of the flowers have three large blotches or spots.

#### **POPPIES**

Unrivaled for continuous and dazzling display of the brightest colors. The seed is fine as dust and should not

be covered. Scatter on the surface, press in with a board and moisten until started. Sow as early as possible, and where the plants are to remain, as they will not stand transplanting. Average height two feet. Always conspicuous and brilliant.

CARNATION FLOWERED. Fine double mixed.

SHIRLEY-MIXED. This magnificent species sports to numberless shades of color, from pure white to rose pink, carmine and deepest crimson. H. A.

ICELAND LACINATED MIXED. White, salmon, rose and orange, with yellow stamens. Petals delicately lacinated and fringed. Dwarf. H. P.

HARDY PERENNIAL POPPIES. Oriental Poppies should be sown in early spring in the open ground as soon as it is fit to work.



Petunia

#### PHLOX DRUMMONDI

Very beautiful free-flowering annuals of quick, compact growth. When grouped in masses the color effect is brilliant beyond description. They will grow even in poor soil, but in order to develop to the highest perfection must have rich soil and plenty of room. Plants from seed sown in the open ground in fall or early spring will begin flowering about July 1st and be literally covered with bloom until autumn. They are unsurpassed for cutting. Height one foot.

FINE MIXED. White, pink, scarlet, etc.

HARDY PERENNIAL PHLOX. Fine herbaceous perennial for beds or mixed borders. Mixed.

#### SALVIA

(FLOWERING SAGE). Among the most brilliantly colored of garden flowers and extremely useful for bedding; also valuable for pot culture. Blooms are borne in long spikes well above the foliage and are of fiery red, crimson or blue color, continuing in flower for a long time. Start early in heat and transplant into light soil one or two feet apart. Tender perennials, but blooms the first season; height two to three feet.

SPLENDENS. Large, brilliant scarlet flowers are in these plants afforded a rich, dark green background of dense foliage. This variety is most generally used in parks and on extensive lawns, as in growth it is more vigorous than the more dwarf varieties.

#### SENSITIVE PLANT

(Minosa Pudica)

A curious and interesting plant with pinkish white flowers; the leaves close when touched or shaken. One and one-half feet. The favorite variety. 2-3; T. A.

#### STOCKS

(GILLY FLOWER). Desirable as pot flowers as well as for planting in the garden. Must be kept cool and moist. The stocks, though not thriving so well in America as they do in England, are indispensable where a fine display of flowers is wanted.

53—DOUBLE MIXED. These favorite summer flowers are excellent for bedding out and afford fine blooms for cutting.

#### SWEET WILLIAM

For display in the garden the Sweet William is unsurpassed. The plants produce a succession of flower clusters, thus affording splendid bloom for several weeks. The colors are exceedingly varied, ranging from white through many shades of rose, lilac, red, carmine, crimson, maroon to nearly black, usually two shades to each plant.

Hardy perennial; one and a half feet high. MIXED. Many brilliant colors. Choice.

#### SHASTA DAISIES

One of the most satisfactory hardy plants for shrubbery border. Flowers profusely throughout the summer, making excellent cut flowers for decorative purposes. Quite a profitable plant to grow, as the flowers are in big demand by florists. Price, packet, 10 cents.

#### **SCABIOSA**

(Mourning Bride, Sweet Scabious, Pincushion Flower, Egyptian Rose, Etc.)

#### VIOLET

The violets commonly grown by florists are propagated from cuittings. The flowers grown from seed are smaller and more delicately colored, but quite as fragrant as the named sorts. As a rule violets do well in any good, well-enriched soil. The best results, however, are obtained from soil prepared from sod taken from a rather heavy, sandy loam that is well drained.

ODRRATA. Sweetly fragrant. Bright blue.

#### VERBENA

The verbena has been wonderfully improved during the past fifty years in form and size of flower truss and thrives particularly well in American soil. For masses in beds on the lawn no plant excels it. In the varieties may be found every color from white through lilac and rose to purple and very dark purplish blue. If sown in open ground in May they will bloom in August, but if started in the house in pots in winter they will flower sooner and may be had in constant bloom from June even until after the early light frosts.

MAMMOTH EXTRA CHOICE MIXED.

#### WALLFLOWER

An old favorite garden flower. The large, massive spikes of the wallflower are very conspicuous in beds and borders and are very useful in making bouquets. Sow the seed early in hot-beds and while the plants are small, prick them out into pots and sink the pots in the earth. Tender perennial; one and one-half feet high.

DOUBLE MIXED. All the desirable colors.

#### WILD FLOWER-GARDEN

A mixture of from fifty to seventy-five varieties of standard, hardy flowers, all beautiful and easy to grow. Very useful for covering untidy-looking bare places, fence corners, embankments and similar unsightly spots. Will produce a continuous display all summer long.

#### ZINNIAS

No flowers are more easily and certainly grown from seed sown in the open ground. They bloom continuously. Height about eighteen inches. Set plants eighteen inches apart. Few flowers are as satisfactory as zinnias.

ELEGANS. Double mixed. A choice selection. Large flowering.

### **CLIMBING VINES**

#### BALLOON VINE

A rapid-growing, handsome summer climber, small, white flowers, followed by inflated vessels, shaped like small balloons. Ten to fifteen feet; annual.

#### CANARY-BIRD VINE

A rapid growing, summer-climbing annual, growing ten to fifteen feet high. It will cover trellis work in the most graceful manner, producing hundreds of its pretty fringed bright yellow flowers, which resemble a canary bird with expanded wings.

#### COBOEA SCANDENS

A fine rapid growing climber with handsome foliage and large, bell-shaped flowers, green at first, but rapidly changing to a beautiful deep violet-blue. A well established plant will run about thirty feet in a season, covering a large veranda with handsome foliage and beautiful flowers. Tender perennial.

#### **CLIMBING VINES—Continued**

#### CLEMATIS

MIXED. Extra choice, large flowering varieties with beautiful clusters of purple and white flowers.

#### CYPRESS VINE

(Ipomoea Quamoclit). A most beautiful climber with delicate, dark green, feathery foliage and an abundance of bright, star-shaped, rose, scarlet or white blossoms, which contrast most effectively with the graceful foliage. Tender annual: about fifteen feet high.

Mixed Colors. White and scarlet.

#### DOLICHOS

(HYACINTH BEAN). A popular climber of extra rapid growth, making a dense and attractive screen.
MIXED COLORS. White and reddish violet.



Clematis Paniculata

#### MOMORDICA

BALSAM PEAR. A curious annual climber, with yellow blossoms and gracefully cut foliage. The fruit is pear-shaped and has a warty skin; when ripe it bursts open and shows a brilliant interior of large carmine colored seeds. Fine for trellises, etc.

#### GOURD

(Cucurbita). A tribe of climbers with curiously shaped and colored fruit. Being of rapid growth, they are fine to cover old fences, trellises, etc. Tender annual; ten to twenty feet high.

JAPANESE NEST EGG. The fruits make excellent nest eggs, since they are white, of proper size, do not crack and are not injured by heat or cold. Vine very handsome.

DIPPER GOURD. Useful for many household purposes and a desirable vine for porches.

HERCULES CLUB GOURD. Produces immense club-shaped fruits, four feet long.

SMALL VARIETIES, MIXED. Produces a great variety of small curious fruits.

DISH CLOTH OR LUFFA. Sponge-like, porous lining, is dried and used in the bath or for dishcloth.

#### HUMULUS JAPONICUS FOLIA VARIEGATA

A strikingly beautiful variety of Japan hop vine, the leaves are liberally and distinctly striped and blotched with silvery-white and gray on deep green. It is a rapid summer climber, in three or four weeks time attaining a height of twenty to thirty feet; resembling the common hop, but, being an annual, attains full perfection the first season. The foliage is luxuriant, making a dense covering. One of the best plants for covering verandas, trellises, etc. Heat, drought and insects do not trouble it.

#### MORNING GLORY

(Convolvulus Major). Either of the varieties listed will make a beautiful display of rapidly growing vine and gorgeous flowers. The Japanese Morning Glories produce much larger flowers than the old kind, with a wider range of color, including every possible shade from the faintest pink to the deepest blue.

NEW JAPANESE MIXED. The finest colors.

FINE MIXED. The old-fashioned kind.

#### MIXTURE OF CLIMBERS

Sure to produce an abundance of beautiful vines no matter where planted.  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left$ 

#### MOON FLOWER

Makes an immense growth of vine, and dense glossygreen foliage. Seed should be started early, especially in the North as it is a late bloomer. File or cut a small notch in edge of seed before planting, and soak a few hours in warm water.

LARGE FLOWERING WHITE. The old favorite.

#### **PASSIFLORA**

(Passion Vine)

Very popular for window decoration or sunny locations in the garden. Blue. 2-3 hh. P. 10 feet.

#### SCARLET RUNNER

A popular, ornamental climber, with sprays of bright, pea-shaped blossoms.

#### WILD CUCUMBER VINE

Most rapid growing and free flowering. The vines attain a great height; they begin to bloom early, and by mid-summer are covered with large sprays or panicles of small wild flowers.

day.

#### CLIMBING VINES—Continued



Sweet Peas

exposure to the sun, it will attain a height of 25 feet by the middle of October, blooming abundantly the entire season. The flowers are pure white, from five to six inches in diameter, emitting a rich Jessamine odor at night. They begin to open about sundown and close before noon the following

in rich ground, where it has full

### SUMMER FLOWERING BULBS

Bulbs are, as a rule, as satisfactory as anything in the garden. They are very little trouble, requiring no care after being planted, and produce effects unequaled by any other class of plants. Plant in April, as soon as weather is warm, and take up as soon as the tops have died down in the fall. Store away, in some dry place, until next spring.

#### CANNAS

The King of all bedding plants. Producing great masses of large, lily-like flowers all summer. They commence to bloom in June and continue until frost. Plants have a green and bronze foliage: are suitable for planting in beds of all possible shapes and sizes. They do best in rich soil, and should be watered well during dry seasons. We have

an expert Canna grower who grows only the very best varieties in this country and abroad. Among the excellent collections we offer this season are the Gold Medal Canna Express and the grand bronze leaf canna, King Humbert. Planted when ground is warm. Get your order in early.

#### DAHLIAS

Well known autumnal flowering plants. They blossom during end of August, September and October, and surrender only to the Frost King. Our selections contain all the best varieties, and the roots we offer are fine and healthy.

A collection of 24 different named varieties, one root each, \$3.00; 12 varieties, one root each, \$1.50; single root.

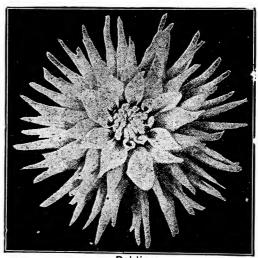
PAEONIES—Herbaceous. Are among the most showy and useful of hardy plants. They are all hardy and admirably adapted to the climate of our most northern states, growing well in almost any situation or soil. We offer a splendid assortment. 25 cents each. \$2.50 per dozen.

#### GLADIOLUS

The most attractive of all summer-flowering bulbs are the Gladiola. Their cultivation is very simple, as they will thrive in any ordinary garden soil. A succession of bloom may be had from July to September by planting at intervals from April to June. Plant six inches apart in beds of double rows and three inches deep.

### ELEPHANT EAR CALADIUM ESCULENTUM

The Caladium Esculentum is one of the handsomest of the ornamental-leaved plants. Roots obtained in the spring will make good plants in the summer. Leaves three feet or more in length, nearly as broad. There is nothing so good as the Caladium for grand bed foliage in the garden.



Dahlia

### SWEET PEAS

#### MIXTURE OF SWEET PEAS

Superb Mixed

This strain embraces more fine varieties than are found in Eckford's New Seedlings Mixed, and is superior, as it is made up of an assortment of many beautiful tints and colors of large flowered sorts which no other mixture contains.

ECKFORD'S NEW SEEDLINGS MIXED
Composed entirely of Eckford's finest large-flowered varieties. We make up this mixture from a special formula, putting in the different combination of colors.

PINK AND REDS MIXED

Best colors.

SPENCER VARIETIES MIXED
Very distinct.

## ROOT CROPS TO FEED STOCK MANGELS AND SUGAR BEETS

CULTURE The ground for growing Mangels or Sugar Beets should be plowed very deep, 12 to 16 inches, pulverized fine and made as mellow as possible. Drill in the seed one to one and one-half inches deep in rows 2 to 3 feet apart. Middle of March to first of June is the proper time for sowing. Use four to six pounds of seed per acre if growing them for feeding purposes, and 15 to 20 pounds if growing for sugar factories. Keep the soil free from weeds and loose by frequent use of the cultivator. When plants are  $2\frac{1}{2}$  inches high thin out to 8 or 12 inches apart in the the rows, according to richness of the ground. The easiest way to thin out the rows is to cut with one or two strokes of the hoe, all plants not needed, leaving two to three plants in a place. A few days later, when plants have straightened up, they must be thinned out by hand, one to a place.

The best time to plow the ground, when possible, is in the fall, spreading the manure first, then plowing it under and leave it until next spring before leveling and harrowing, which is done

just before seeding.

MANURING Beets and Mangels are gross feeders and take from the ground a large amount of phosphoric acid and nitrogen, which should be replaced every year if good crops are expected. Scientists tell us that as much as 20 to 25 pounds of phosphoric acid are taken from one acre of ground by a crop of beets. The elements needed to raise a good crop of Mangels or Beets are nitrogen, potash, phosphoric acid and lime. Phosphric acid is supplied by a dressing of stable manure, bone fertilizers, or by the turning under cf a green crop. Nitrogen is furnished by the use of nitrate of soda, which is a salt very rich in available nitrogen, or by growing for one year or more before raising beets a leguminos crop, such as field peas, clover or alfalfa.

The proper time to apply stable manure or bone fertilizer is in the fall, at the time of plowing; but nitrate of soda should not be used until sowing time, or still better, when plants have started to grow. Ten to twelve tons of manure or 500 to 700 pounds of bone fertilizers are generally applied per acre. A compound fertilizer, comprising 600 pounds of fine ground bone meal, 150 pounds sulphate of potash and 200 pounds of nitrate of soda has given great results. This compound fer-

tilizer should be used when plowing is done in the spring, shortly before sowing time.

GOLDEN TANKARD Tops comparatively small, with yellow stems and mid-ribs; neck very small. Roots large, evoid, but bottom usually of larger diameter than top, light gray above ground, deep orange below. Flesh yellow, zoned with white.

GIANT FEEDING SUGAR BEET or HALF SUGAR MANGEL. A strain of beets very desirable for stock feeding, affording not only a very large crop much easier to harvest than other sorts but much richer in sugar and other nutritive elements. Roots light bronze green above ground, grayish white below, with white flesh. On account of growing partly out of the ground and the long ovoid shape the crop can be harvested and stored easily and at less expense than any other root crop.

YELLOW TANKARD Yellow Skin and Yellow Flesh. In high esteem for dairy use. Flesh yellow; zoned with white. Differing from all other varieties. Early and a heavy cropper. Will bear close planting. IMPROVED MAMMOTH LONG RED Roots very large, u n i f o r m l y straight and well formed, comparatively thicker and deep er colored than the common sort and with smaller top. Flesh white tinged with rose. Under careful culture enormously productive. Our stock will produce the largest and finest roots which can be grown for feeding stock and is

vastly superior to many strains offered under other names, such as Norbitan Giant, Colossal, Monarch, etc.

VILMORIN'S IMPROVED One of the richest in sugar content of the sorts in cultivation. It will do better on new lands than any other, suffers less from an excess of nitrogen and will keep the best. Tops of medium size, with smooth, bright green leaves. Roots of medium size, similar in appearance to Jaensch's Victrix; flesh white, often yielding from ten to sixteen tons per acre.



Improved Mammoth Long Red Beet

### STOCK CARROTS

The yellow varieties are particularly fine for milch cows as they tend to color the cream and butter. As much as 30 lbs. per day can be fed with splendid results. Sheep should be fed 1 to 3 lbs. daily. Horses are very fond of carrots and when fed occasionally improve their coats. Carrots have more fattening value than mangels and sugar beets but are less profitable when fed in large quantities as the yield per acre is much smaller and the cost of harvesting is greater. Can be sowed any time from March to June. Requires 2 to 21/2 lbs. of seed per acre. The varieties best suited for stock feeding are:

MASTODON. WHITE BELGIAN. LONG ORANGE.

#### RUTABAGAS AND TURNIPS

Rutabagas and Turnips are extensively grown for stock feeding, and on account of the comparatively short time required for their growth are very remunerative. Rutabagas are better than turnips for feeding, owing to the firmness of the bulbs, the better quality of the flesh and the long period during which they can be kept, but

need a longer time to reach muturity.

One of the main features of turnips is that they can be sown as late as the middle of September and still grow large enough for winter use; consequently can be grown on lands which have already raised a crop. Rutabagas and turnips should be fed to milch cows night and morning just after each milking to prevent tainting of the milk and butter. Four pounds of rutabagas have a feeding value equal to one pound of good hay. Feed from 10 to 20 pounds daily to a milch cow and 2 to 4 pounds per sheep. For price and full description see Turnip Seed Section, under Garden Seed, in this catalog, pages 39-41.

### PEANUTS

#### Plant Plenty of Peanuts

The peanut as a "cash" crop and as a feeding and fattening crop is coming into its own. In many parts of the South it has long been looked on as desirable to have a small peanut patch for the hogs to run on for fattening and possibly a few overfor the children to "parch."

Now the peanut has become a full man sized crop with tens of thousands of acres under cultivation both for hog feeding and in many sections for sale direct to oil mills for the man-

ufacture of peanut oil and meal.

Peanuts ought to be a regular crop on every farm that has sandy, light clay or loose loam soils. Every part of the crop is of use. The tops make splendid hay or forage, the nuts are valuable either for feed or for sale to the oil mills, most of whom will contract in advance for your crop. You can trade with them and get back the meal for feed just as you would trade cotton seed for cottonseed meal.

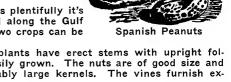
Last, but not least, the peanut is one of the leguminous plants that draw that most costly element of plant food, nitrogen, from the air, depositing it in your soil for the use of

future crops.

The peanut as a real crop has come to stay. If you fail to plant peanuts plentifully it's your loss. The Spanish peanut is early and a heavy bearer. In Florida and along the Gulf Coast where they can be planted as early as April and as late as July 15th, two crops can be made. Plant from 1 to 2 bushels per acre.

An early, heavy bearer; bushes SPANISH PEANUT growing close, so very easily cultivated. Grains or nuts are smaller, but much sweeter and finer flavoed and much more free from "pops" than the larger sorts. Best recleaned seed stock.

VIRGINIA IMPROVED A very profitable sort, planted almost exclusively in the peanutgrowing section of Virginia. It is the standard variety for



roasting. The plants have erect stems with upright foliage and are easily grown. The nuts are of good size and contain remarkably large kernels. The vines furnish excellent forage.

The finest variety grown, espec-TENNESSEE RED ially adapted to black, waxy land, as well as sandy soil. The nuts contain three large kernels each, and are enormously productive.

#### NORTHERN GROWN SEED POTATOES

CULTURE Any good well-drained fibrous loam will produce potatoes under right climatic conditions. For early potatoes, which mature in 8 to 10 weeks from planting. Cultivate often. Spray with arsenate of lead mixture as a protection from flea beetle, potato beetle and blight. 8 to 10 bushels will plant an acre.

EARLY OHIO Northern-grown in the Red River Valley.

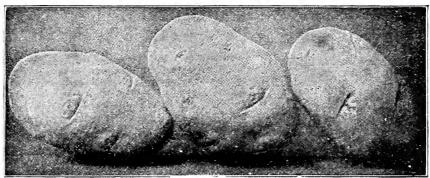
Among the standard early varieties it undoubtedly stands at the head of the list.

BLISS' RED TRIUMPH Extremely prolific and a full week advance of Early Rose.

Color, a beautiful light red. Size, medium.

SOUTHERN GROWN TRIUMPH A very popular potato in the South. Our stock of this variety is true southern grown second crop.

#### NORTHERN GROWN SEED POTATOES—Continued



Irish King

EARLY ROSE No introduction is necessary for this standard productive variety.

IRISH COBBLER When it was first sent out it was not claimed to be particularly early, but extensive growing in this locality proves that it is fully as early as the Early Rose.

IRISH KING Early, smooth, uniform in size, fine grain; cooking qualities cannot be excelled.

### **SEED SWEET POTATOES**

RED BERMUDA

PORTO RICAN YAMS

NANCY HALL

PUMPKIN YAMS

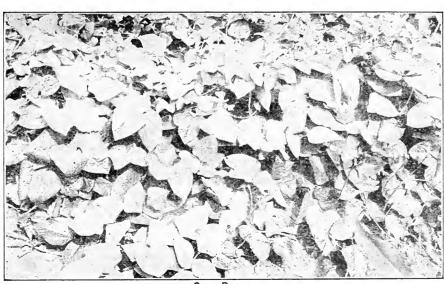
Sweet Potato Plants in Season.

### **COW OR FIELD PEAS**

THE GREAT SOIL IMPROVERS.
MAKE POOR LAND RICH. MAKE
GOOD LAND MORE PRODUCTIVE. A SPLENDID AND NUTRITIOUS GREEN FORAGE OR HAY
CROP

Cow Peas make one of the largest yielding and most nutritious forage crops grown. There is also no surer or cheaper means of improving and increasing the productiveness of our soils than by sowing the Cow Peas. It is not necessary to turn under the crop of vines to improve the soil, and it is really considered more economical and the best way to cut off the vines and cure them as a forage or hay crop, and then turn under the stubble and roots. Even when the crop is cut off, the land is left in very much better mechanical condition and the productiveness very much increased over what it was

before the crop was grown. The cow peas, to a greater extent than any other leguminous crop, have the power to extract nitrogen and ammonia from the atmosphere and to store same in the vines and roots, so that, even if the crop is cut off, the land is enriched and its condition improved. From 10,000 to 18,000 pounds of green fodder per acre have been produced.



Cow Peas

TO GROW FOR HAY they are most valuable, as they yield an immense quantity of feed of the best quality and produce the crop in so short a time. The bacon made from hogs fed on the dried peas is much sweeter and more solid, and the fat will not run out in cooking so much as if fed on corn.

#### **COW OR FIELD PEAS—Continued**

FOR ENSILAGE they are unsurpassed, being more nutritious than green corn and other crops used for this purpose. When it is desired to turn the whole crop under as a soil producer, it is better to do so after the vines are partly dead. A good picking of peas can be made before plowing under.

SOWING COW PEAS WITH SOJA BEANS, KAFFIR CORN, ETC. Cow peas are frequently sown with kaffir corn, soja beans or corn, in order to furnish some support and enable the vines to be cut and harvested to better advantage. The experience of the past two seasons has conclusively proved that the best crop to sow with cow peas is soja beans, and they should be sown at the rate of about 30 pounds of the soja beans to 60 pounds of cow peas. Both make a nutritious feed, and the soja beans seem to hold up the vines and harvest better with cow peas than any other crop. When kaffir corn or sorghum is sown with cow peas it should be sown at the rate of  $12\frac{1}{2}$  lbs. of kaffir corn or sorghum with 60 lbs. of cow peas to the acre.

Some people sow millet with cow peas for hay crop. with very satisfactory results. Where millet is sown with cow peas, it will, of course, be desirable to sow some quickgrowing variety of cow peas, such as the New Era or Whippoorwill. 35 to 40 pounds of Golden millet and the same quantity of cow peas should give a liberal seeding. Cow peas can be sown in May, June of July, at the rate of

from 60 to 90 pounds per acre. A farmer's acres and their fertility and crop producing power is just as much the farmer's capital as is the machinery and buildings of the manufacturer, as the stock of goods on the merchant's shelves. You can no more afford to let the fertility of your acres run down than the merchant can get out of staple goods or the manufacturer can afford to let his machinery wear out or run down. To succeed they must keep up to par or increase.

WHIPPOORWILL PEAS A favorite early, upright-growing variety, more largely used and sold than any other kind. Has brown speckled seed which are easily gathered, makes a good growth of vine. which can easily be cut and cured as dry hav.

NEW ERA This extra early cow pea is without doubt one of the most valuable varieties in cultivation. It is quicker in growth than any other cow pea, and makes a very large growth of vine and a very prolific yield of peas. It stands upright, making the peas easy to gather. The peas are smaller than other varieties, so it does not require so many to plant per acre. (50 to 60 pounds per acre).

CLAY The seed of this variety are medium sized and cream or clay colored; vines grow long and very leafy; seed matures medium late. One of the best for enriching soil.

BROWN CROWDER This is a very fine variety of peas and is getting popular as a table pea throughout the Southwest.

About the same as Brown Crowder WHITE CROWDER except it is a white pea with light brown eye.

CREAM OR LADY PEA This is a very line value, it table use and is also a great soil builder.

LARGE WHITE BLACK EYE The large Black Eye peas are more prolific, better flavored and bring a higher price than most any other variety of peas. Where peas alone are wanted planters will probably find this variety more desirable than any other

MIXED COW PEAS A great many people prefer to plant mixed peas, and to those of our customers who want them we are prepared to furnish a good mixture of the above varieties.

### BEANS

EARLY SPECKLED VELVET BEANS The Early Speckled is a sort from the old Speckled variety which originated in Georgia. It closely resembles the older variety except in earliness and vine growth, making a little more than half as much vine with a ripening season only a few days later than Yokohama and a sure crop anywhere in Georgia, Alabama, Mississippi; fully as heavy cropper as the Old Speckled. Seed very similar. Be sure of true stock.

PINTO BEAN This is the crop that has reclaimed thousands of acres of waste dry land in Colorado, Arizona and New Mexico. Good dry land farmers report yields of 5000 pounds and more per acre with only two rains during the growing season. The bean is speckled and about the size of the navy bean. They are larger than the Tepary and the yield is greater. Government tests show that it is superior in food value to the navy bean; a delicious baking bean. It is said that weevils never touch it. Plant same as Tepary, using 30 pounds to the acre.

SOY OR SOJA BEAN The soy beans have demonstrated a great farm value in the past few years, and could be profitably grown to a much greater extent. Being a quick maturing annual, it will prove especially helpful for those who cannot grow clover. A crop of soy beans can be produced between spring and autumn frosts anywhere in the states. It grows on land that will make 40 bushels of corn per acre and will, if plowed under, put \$16.00 worth of fertilizer matter per acre into the soil. Land that will make 11/2 tons of timothy or clover will make three tons of soja bean hay, worth more per ton than timothy.

CULTURE-Prepare as for corn. Nitrogenous manures are beneficial. Seed may be sown broadcast with wheat drill, in rows 16 to 24 inches apart, or with corn drill, to be cultivated as corn, one-half bushel per acre. Soy beans may follow a crop of rye or barley or be sown in the standing corn at time of the last cultivation, if

#### FIELD BEANS—Continued

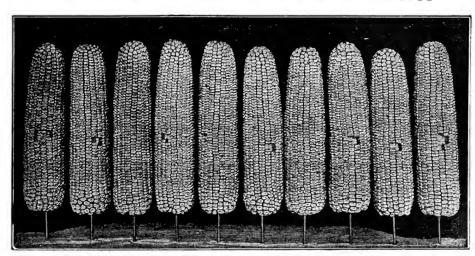
weather is seasonable. If sown in corn, put in two rows of soy beans between each two rows of corn. Sow about two pecks to the acre in rows, like corn, and cultivate it, if seed is desired. For pasture, soiling or hay, sow four or five pecks to the acre. To harvest for seed cut off or pull up the plant when the first pods begin to open and thresh them as soon as dry. In threshing remove concaves and run cylinder slowly or seed will split.

TEPARY BEAN A small white bush bean which has produced paying crops with an annual rainfall of only seven inches. The Tepary germinates quickly with a small amount of moisture, will stand protracted

droughts and extremes of temperature. If planted in April, crop may be harvested in July and another crop planted and harvested in October. Yields are reported varying from 400 to 1,500 pounds per acre, depending on the amount of rainfall. The hay is liked by cattle and may also be fed to horses and mules after they have learned to eat it. Teparys, when well cooked, are a most palatable and nourishing dish.

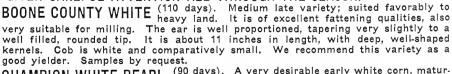
One pound will plant 150 feet of row; 12 to 15 pounds to the acre. Plant in drills  $3\frac{1}{2}$  to 4 feet apart. May be planted closer where there is ample moisture. Give plenty of cultivation, particularly under dry conditions.

### SELECTED SEED FIELD CORN



All of the seed corn we offer is carefully selected, properly cured and perfectly graded. The tips and butts being removed, assures full planting, no hills having been missed on account of a butt or tip kernel having choked the planter as is generally the case with corn that has been poorly or improperly graded.

OUR STOCK OF SEED CORN IS GROWN IN THE LOCALITY BEST SUITED FOR ITS HIGHEST DEVELOP-MENT AND IS GIVEN CAREFUL ATTENTION ALL THROUGH THE SEASON.



CHAMPION WHITE PEARL (90 days). A very desirable early white corn, maturing in about ninety days. The ears are about 9 inches in length, having on the average sixteen rows of good sized white kernels on a very small white cob.

IOWA SILVER MINE (100 days). A most popular variety, growing to a medium height. Ears set about 4 feet from the ground and measure about 10 inches in length, with about eighteen to twenty rows of pure white, mealy kernels on a small white cob. This is one of the heaviest yielders, and generally gives satisfaction under various conditions. It is highly recommended.

HICKORY KING (110 days). This is an entirely distinct variety among the white corn, combining the largest kernel on the smallest cob. A single grain will almost cover the cob of an ear broken in half. It is a great yielder and will give more shelled corn to a given bulk of ears than any other white variety known. It will give the best of satisfaction under any soil in proper condition; produces good, strong stalks, often bearing two good ears. As a feeding corn it can't be surpassed, and is also in demand for milling purposes. We recommend it highly.





#### SELECTED SEED FIELD CORN—Continued

ST. CHARLES WHITE (120 days). This variety of corn is one having long-established merits, having various uses. In the East, no better corn can be obtained for ensilage and dairy purposes; in the West, Central West and South or wherever the corn season is long and warm, this corn is the profit maker for that locality, either as a feeding or a milling corn. The stalks grow tall and strong. The ear is about 11 inches in length, having about twenty rows of deep large white kernels on red cob of medium size.

WHITE WONDER

Being a luxuriant and rapid grower, it shades the ground early in the season thus conserving the moisture and enabling the corn to withstand the drought—an exceedingly early corn; very large ears.

REID'S YELLOW DENT Among the many excellent varieties of yellow corn grown in the corn belt, Reid's Yellow Dent stands among the best of all yellow varieties. It is extensively used by stock feeders. The color is a rich yellow, closely packed and very deep grains, which entirely cover the butts and tips of the cob. Grains slightly rough and dented on the top. Stalks of good height, with one or two ears, 10 to 12 inches long and 14 to 16 rows. The cob carries a large amount of corn, often shelling 88 per cent or better. Mature in about 100 days.

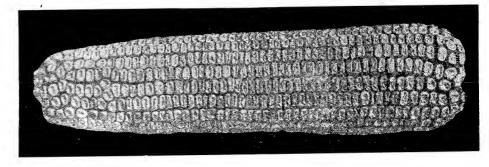
SURCROPPER (110 days). Surcropper corn gives good results wherever tried, and the demand is increasing every year. Claimed to be an early maturing drought resisting corn. Ears are of good size, stocky and well formed. They have about fourteen rows of large, white grains of good depth and attractive form.

YELLOW LEAMING One of the oldest of the yellow varieties known. It is a general favorite with stock raisers on account of its large yield of grain and for fodder and ensilage. The grain is light yellow and does not become as flinty as most other yellow varieties. The cob is red and medium size. The ears are from 9 to 11 inches in length and from 7 to 8 inches in circumference. Stalks from 10 to 12 feet high and large amount of foliage. Matures early.

IOWA GOLD MINE This is a Yellow Dent variety that is grown extensively throughout the United States, and by many is claimed to be the best of all yellow varieties. The habit of growth and appearance is the same as lowa Silver Mine, as is its earliness, size of ear and productiveness. The grain is of a bright golden color, hence its name; very small cob which dries out nearly as soon as it ripens. The stalk bears from one to two good ears which are 8 to 10 inches long. It matures 90 to 100 days. This is the corn for thin land, on rich land the yield will be proportionately greater.

### STRAWBERRY OR CALICO CORN

A very old variety very popular with stock feeders. It is a combination of colors—red, white and yellow. The ears are large with deep grains and small cob, 7 to 8 inches in circumference, and 9 to 12 inches long. It is rich in protein. Matures in about 100 days. A bad ear in a field of Calico is a rarity. Load for load, Calico will outweigh any other corn we know of.



BLOODY BUTCHER An early corn, making a good yield and frequently used for replanting. The color varies from a light to a deep red, nearly black. Ears from 9 to 11 inches long, 16 to 20 rows. Grains dented and sometimes quite rough. This corn is not much bothered by worms or birds.

MEXICAN JUNE CORN This corn, originally from Mexico, has a distinct place to fill in the Cotton Belt, not as a general crop corn, but one to fill in with on late plantings. It is largely used in the Southwest for planting after oats and wheat.

We do not advise (if grain is wanted) planting until after June 1st in the Southeast. Between June 15th and July 1st is better. If planted earlier the tendency is to run largely to stalk and making little grain.

It is a great drought resister and usually, if there is enough moisture to sprout the seed, a crop is assured. If wanted mostly for forage or ensilage plant in April or May. Early planting makes stalks 12 to 15 feet high, leaves 4 to 6 feet long.

Ears 8 to 9 inches long, grains short to medium, cobs medium in size, and while usually white, red cobs are often found. Ears have mostly white grains, but dark blue and red grains often appear, sometimes only one to three to the ear. This apparent mixture of color is peculiar to many varieties of Mexican corn.

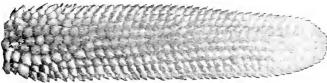
Mexican June also makes fine "roasting" ears for use right up to frost.

SQUAW CORN Originated in Oklahoma and is one of the most popular varieties sold in the Southwest. It is a natural drought resisting variety. The grains present a combination of colors. Some are red, others yellow, blue and white. Most of the corn runs to blue and white grains. Makes a first class, large ear ten to twelve inches long. Can be planted any time from March to July.

### POP CORN

PLANTING DIRECTIONS—1 ounce to 75 feet of row; 12 pounds per acre. A good garden soil will produce good popcorn. Select a sunny, warm location and plant in rows 3 to 4 feet apart. Drop seeds every 14 inches and cover 1 inch deep. Cultivate or hoe often.

Aside from the value of popcorn for "popping" it possesses great merits as a field and garden crop. It produces shocked corn at about 8 to 10 tons per acre and the small ears which ripen early are fine feed for pigs and other stock. Popcorn can be planted closer than other kinds and the yield is almost equal to the larger varieties.



THE BEST VARIETIES OF POPCORN

WHITE RICE A very productive variety. Ears short, kernels long and pointed. A splendid popping sort, and the most salable among the retail dealers.

GOLDEN QUEEN Ears of large size, and the kernels pop to over an inch in diameter. One of the best and most prolific varieties grown.

### **NON-SACCHARINE SORGHUMS**



FETERITA Feterita grows about five feet high on an average, and a crop of it growing looks very much like a crop of kaffir or dwarf white milo. The heads grow up straight like kaffir and are a little larger around but not quite so long. The grain is white like kaffir and about twice the size. The grain is softer than kaffir or milo grain and is liked better by all kinds of stock. Feterita matures from 40 to 60 days earlier than kaffir and is therefore well adapted to countries with short seasons, or can be grown as a second crop where the seasons are long, after the wheat or oat crop. After being tested in Western Oklahoma for three years, it has been found a much greater drought-resister than kaffir or milo. The dryest year the farmers of Oklahoma have ever experienced, with less than three inches of rainfall for the entire year, Feterita grown by the side of kaffir or milo produced from 50 to 85 bushels per acre, while the kaffir and milo produced from 10 to 25 bushels. This year there is a difference of from 15 to 25 bushels in favor of Feterita. Feterita has the same feed value for feeding all kinds of stock or poultry that kaffir or milo has.

METHOD OF PLANTING—Feterita should be planted in rows  $3\frac{1}{2}$  feet apart and the seed should be dropped from 6 to 8 inches apart in the row. One bushel (56 pounds of seed) will plant about 16 acres of land. The seed being larger than kaffir, will not plant as far in acreage as the same amount of kaffir seed. When Feterita gets up about 5 inches high, each plant puts out from 4 to 10 sucker plants and each of these sucker plants grows up the same as the main plant. On account of this suckering habit with Feterita, it should be planted a little thinner than kaffir or milo. The suckering habit with this plant also accounts for the great yield of this crop.

CULTIVATION—The cultivation of Feterita should be the same as that for corn, kaffir or milo. Where dry land methods of cultivation are practiced this crop should be cultivated according to these methods.

HARVESTING—Feterita should be cut and bound the same as that for corn, kaffir or milo. Where dry best results from it.

RED KAFFIR CORN Grows taller than the white; stalks slender, juicy and very leafy. The seed is red, smaller than that of the white, and hard and brittle. Ripens earlier than that of the white and yields much heavier.

WHITE KAFFIR CORN Grows 4 to 5 feet high. The stems are very leafy and keep green and brittle, unlike other sorghums, which harden. Makes excellent fodder, either green or dried. For grain, sow 10 pounds to the acre, in rows 3 feet apart. For fodder, sow from one-half to one bushel, either broadcast or in drills.

HIGARU (This is pronounced Hagaria). It is a new grain or forage crop, which is a cross between white kaffir corn and feterita. It is more desirable for forage than either, as the bad qualities of both have been eliminated. Feterita shells out pretty bad and Hagaru will not. It is considered more profitable to raise than either kaffir or feterita. Its dwarf habit of growth and the compact heads of large white grains make it very attractive. The stems are rather sweet and horses, cattle and all stock, eat stalk, fodder and grain. The yield is fully three tons.

WHITE MILO MAIZE It is a much heavier producer than the Yellow Milo Maize.

#### NON-SACCHARINE SORGHUMS—Continued

DWARF YELLOW

A sure dry weather crop. Has yielded as high as seventy-five bushels per acre. Stalks 4 to 6 feet high, with many juicy leaves and splendid heads. May be cut with a binder and shocked like wheat. Requires shallow planting and shallow cultivation.

JERUSALEM CORN The best and surest grain crop for dry countries—even better than kaffir corn, dhoura and milo maize. It grows from 3 to 5 feet high, makes one large head on the main stalk and several smaller ones on the side shoots; eight heads sometimes grow on one stalk. The grains are pure white and nearly flat. Three pounds will plant an acre.

EGYPTIAN WHEAT OR SHALLU It belongs to the sorghum family and should be planted like can or milo, either for grain or hay. Broadcast, it makes from four to eight tons to the acre. In drills, it yields seventy-five bushels of grain per acre. The grain is white inside and has a light hull. The heads are large and heavy, the grain hanging on one side. All stock love it, and do well on it. The plant grows from 5 to 7 feet tall, and produces more and better fodder than cane. It will stand more wet or dry weather than maize or cane. Plant in drills three feet apart, using ten pounds of seed per acre, or broadcast, using from two to four bushels.

### **COTTON SEED**

LONE STAR COTTON The demand for Lone Star Cotton Seed is increasing every year. Growers who have been growing this variety all seem to be highly pleased with it, claiming it has larger bolls than the Mebane, is easier to pick and is more storm-proof. It is a first-class yielder and commands top prices; the per cent of lint ranging from 38 to 40 per cent. Have a limited quantity of first-class seed of this celebrated cotton, and advise my customers to give it a thorough trial.

MEBANE'S TRIUMPH BIG BOLL This is probably the most widely advertised cotton grown in Texas. It is a five lock cotton,

yielding from 38 to 42 per cent lint, and is very popular. This cotton has a strong, thrifty, deep-rooted stalk that resists drought well. Has long limbs with short points. Begins to form bolls near the ground and close to stalk.

ROWDEN FANCY BIG BOLL This variety was introduced in 1903, and is planted very largely all over the South. It is a big boll, five lock cotton, very easy to pick. Very productive.

LONG STAPLE Grown very extensively in some sections, and where it succeeds produces a fine crop that commands the very highest prices.

### **SACCHARINE SORGHUMS**

Sow six to ten pounds of seed per acre in drills, and from 100 to 150 pounds per acre broadcast.

TEXAS SEEDED OR CROOKNECK RIBBON CANE We have been selling this cane seed for a number of years. It has been planted principally to make syrup and has given the very best of satisfaction to those who have planted it for this purpose. It has been yielding from three to four hundred gallons of best syrup per acre. It is usually planted in rows  $3\frac{1}{2}$  feet apart, using from 6 to 10 pounds of seed per acre. Grows from 10 to 15 feet high. In the past year or two, many farmers have gone into building silos very extensively. Texas Seeded Ribbon Cane is one of the best crops that can be grown to use as ensilage on account of the enormous yield it makes per acre. Expect heavy demand this year, especially for silage purposes.

JAPANESE HONEY DRIP RIBBON CANE This is a large, stocky and vigorous variety, maturing in 120 to 125 days. It sends up two to four stalks, which reach a height of 8 to 14 feet. The stalk is as large or larger than Crookneck, and in quality it compares equally well to Crookneck—to either of which all sorghum can be compared in regard to sweetness. The seeds are plump, slightly larger than Sumac, and when hulls are removed seeds appear to be a dull reddish-brown color; after the threshing process, are almost totally enclosed in a bluntly pointed, glistening red glume; heads are long and medium loose. This variety was lately introduced and fields produced 350 gallons of the very best quality of syrup to the acre. The syrup is lighter in color and milder in taste than that of Sumac, Orange or Amber. Makes the very finest kind of silage.

STRAIGHT-HEAD RIBBON CANE Grows very similar to the Crookneck variety except that it has a straight head. Is first-class to use for ensilage, also for syrup.

EARLY AMBER CANE
This variety is very popular and is largely used to sow for forage. Furnishes a large yield of most nutritious forage which can be fed either green or cured, and will yield two or



#### SACCHARINE SORGHUMS—Continued

three cuttings a year, stooling out thicker each time it is cut. The saccharine matter is of the finest quality and it produces a fine sugar or syrup. It grows 10 or 12 feet high.

ORANGE CANE This variety is a little later than the Amber Cane and is also much used for forage and making syrup.

RED TOP CANE This variety is planted extensively all er than the Amber and Orange, makes the very finest of fodder and is in very heavy demand.

SCHROCK KAFFIR SORGHUM This is a comparative-originated in Oklahoma. It is claimed to be one of the finest of the sorghums for forage and ensilage, as it is quite sweet and grows an abundance of broad, long leaves. It is a wonderful grain to stool out, not unusual for one seed to send up six to ten stalks, each making a fine head of large, light brown grains, which make excellent stock and poultry food. One of the best drought resisters of the sorghum family. Drill at the rate of 3 to 5 pounds per acre.

### **BROOM CORN**

There are many farmers who make this a most profitable crop. One acre will produce 500 cwt. of brush and nearly 40 bushels of seed, which is almost equal in value to oats for feed. Requires soil similar to corn, same cultivation, but should be planted some later in the season. Put in ground in prime condition. We think that more of our western farmers should grow broom corn for market. It is profitable. Frequently planted in drills 3½ feet apart, leaving 6 inches apart; 5 to 10 pounds to an acre.

IMPROVED EVERGREEN This broom corn grows about 8 to 10 feet high, stands up well, and is entirely free from crown corn grows about 8 to 10 feet high, stands up well, and is entirely free from the crown crown corn grows about 8 to 10 feet high, stands up well, and is entirely free from the crown corn grows about 8 to 10 feet high, stands up well, and is entirely free from the crown corn grows about 8 to 10 feet high, stands up well, and is entirely free from the crown corn grows about 8 to 10 feet high, stands up well, and is entirely free from the crown corn grows about 8 to 10 feet high, stands up well, and is entirely free from the crown corn grows about 8 to 10 feet high, stands up well, and is entirely free from the crown corn grows about 8 to 10 feet high, stands up well, and is entirely free from the crown corn grows about 8 to 10 feet high, stands up well, and is entirely free from the crown corn grows about 8 to 10 feet high, stands up well, and is entirely free from the crown corn grows about 8 to 10 feet high, stands up well, and is entirely free from the crown corn grows about 8 to 10 feet high the crown corn grows ab

the field before it is cut, but is strictly a green variety of brush commanding high price.

THE OKLAHOMA DWARF BROOM CORN Originated in Oklahoma. Most valuable strain grows here and in the southwest. Quite distinct from all others in earliness. Of robust habit and extreme productiveness; brush long and well fibered, and is a drought resister. On new breaking it does splendidly, leaving the ground in prime order for fall wheat crop, only slight discing needed to prepare for seeding. Averages five feet in height, making it convenient for pulling brush. It is a great yielder; one of our Oklahoma growers reports several fields yielding 1 to 3 tons fine long brush; seeds may be left to ripen on brush without injury to latter, removing danger of heating from immature seed bins. Stalks make excellent fodder if cut at once after brush is pulled.

### **ALFALFA OR LUCERNE**

(MEDICAGO SATIVA)

An absolute necessity for the Cheapest Production of Beef, Pork, Mutton, Honey and Milk.

Once a good stand is secured it will last for ten to fifteen years, gives three to six cuttings per year, yielding from three to four tons of splendid hay per acre, besides increasing the fertility of the soil. Alfalfa sold or fed will return a higher net cash income per acre, year by year, than any other field crop. It can profitably form the greater part of the feed for mature horses, cattle, sheep and swine, and is the cheapest for securing rapid growth of colts, calves, lambs and pigs. Both green and dry, it is a valuable feed for poultry. For milch cows it is indispensable. An acre of alfalfa cut green and fed twice daily, will support five milch cows without the addition of any other feed.

F. D. Coburn, secretary of the Kansas State Board of Agriculture, in his book on Alfalfa, shows that it is a prof-

itable crop in at least twenty-one states and territories.

In general, it may be stated that land that will produce good crops of corn one year with another is adapted for growing alfalfa. The soil must be deep, neither underlaid by hard sub-soil, through which the roots cannot penetrate nor by permanent water too close to the surface. Under most conditions it does best where permanent water is twenty to thirty feet below the surface. In loose, well-drained land, however, it often does well where it is much closer. The soil should be rich, in good tilth and free from weeds. In securing a stand of alfalfa the seed bed is the most important factor. The land must be deeply plowed and pulverized, well settled and compact and saturated with moisture, so as to bring up the seed quickly and force growth. Sowing may be done either in the spring or fall. Twenty pounds of clean seed are recommended to sow an acre. For hay one crop may be cut the first year, and thereafter it should be mowed whenever it commences to bloom.

"Alfalfa is the oldest plant known to man; it is the most valuable forage plant ever discovered. It has not been appreciated in the eastern part of the United States until the last five years. We are now growing it successfully in every state in the Union, and I believe it is safe to say in every agricultural county in the United States it is being

grown with success.

FANCY ALFALFA-Extra quality American grown.

CHOICE ALFALFA—Contains some dark seed but otherwise will give good results.

#### **ALFALFA OR LUCERNE—Continued**

PERUVIAN ALFALFA A new long-season variety for the Southwest. Its unusual rapid growth, quick recovery after cutting, and continued growth through the winter in favorable climates, results in the production of one or two more cuttings of hay each year than are yielded by the alfalfa commonly cultivated. The explanation for this is found in the difference in the location of the zero point of growth in the Peruvian and in ordinary alfalfa. The temperature at which Peruvian alfalfa ceases to grow is about 48 degrees Fahrenheit, while that of common alfalfa is about 57 degrees Fahrenheit. The repeat orders and the testimonials we are receiving from those who were fortunate enough to obtain some of this seed the last three years is further proof of its remarkable superiority over other varieties in a mild climate.

TURKESTAN ALFALFA This we believe to be one of the most important introductions in recent years. It is a variety of alfalfa brought to us from Turkestan, a part of Asia, where it gets cold and exceedingly dry during certain months of the year. As far north as Wyoming and Dakota, Turkestan alfalfa is perfectly hardy, having withstood a temperature of 25 degrees below zero without harm. It also withstands drought to perfection, and is able to grow satisfactorily with a minimum supply of water, a supply so small that alfalfa would perish. Turkestan alfalfa has a very large root system, which draws the water supply from the subsoil. The fodder which they furnish is greatly superior to common alfalfa, and the yields of hay much larger.

### CLOVER

#### WHITE FLOWERED SWEET CLOVER

(Melilotus Alba). Sweet clover has suddenly sprung into popular favor. For a long time it had been regarded as a pest, but now a place has been found for it and in its place it is a very valuable plant.

Sweet Clover is valuable because of its ability to grow and thrive on the poorest and most barren places. It will not only thrive on soils that are too poor for any other crop but will improve the soil it is growing on. It makes good hay and good pasture, although cattle do not always take to it at first. It resembles alsike clover in that it can grow on moist soils.

Its ability to improve the soil, together with its ability to thrive on very poor soils, makes it especially valuable as a pioneer crop on poor, run down, badly washed fields.

The seed can be sown either in the fall or spring and about 20 lbs. of the hulled seed and 25 lbs. of the unhulled seed is required per acre.

ALSIKE CLOVER (Trifolium Hybridum). Alsike clover wet or swampy land. If you have a piece of land that is too damp for alfalfa or other clovers or grass sow a mixture of about four pounds of alsike clover and ten pounds of red top grass seed. This will make an excellent crop of hav.

Alsike clover is very hardy, is perpetual, will withstand drought and will not winter kill. About six to ten pounds will sow an acre and as the seed is very fine it should be covered only slightly. For bottom lands needing drainage but not subject to overflow an excellent mixture is as follows: Four pounds of red clover, two pounds of alsike clover and ten pounds of timothy. This quantity is for one acre.

RED CLOVER (Trifolium Pratensis). Red or medium clover has long been considered the most important of the clover family. It is valuable both as a



hay crop and a pasture crop and is also beneficial to the soil. It is a well known fact that grain crops will yield more when they follow clover. It is very valuable for enriching wornout soils but the trouble is that the soil is generally too much exhausted before the clover is sown. The better plan is to rotate your crops with clover so that the soil will not become too badly run down.

The common mixture both for hay and pasture is eight pounds of clover and ten pounds of timothy per acre. To get the best hay red clover should be cut when just past the blooming stage, but in consideration of a second crop it is often necessary to cut the first crop a little sooner.

The selection of the seed is of greatest importance. Buckhorn is found in nearly all clover seed and is to be avoided whenever possible. Our seed is especially selected for purity and can be depended upon.

#### CLOVER—Continued

Red clover will grow on any good corn land and when sown by itself the soil should be put in first-class condition. It can be sown either in the spring or in the fall, but as it is not drought resistant in the early stages the moisture should be conserved as much as possible. It is generally sown broadcast at the rate of 12 to 15 lbs. to the acre.

WHITE CLOVER (Trifolium Repens). White clover is excellent for pasture and is especially valuable for mixing with Kentucky blue grass both for lawns and pasture. A few pounds of white clover should be in all permanent grass seed mixtures as it helps fill up the bare spots and is very nutritious. White clover will disappear at the approach of very hot weather but will come back again with rains or seasonable weather. It is very hardy and is a perennial. Sow five to eight pounds per acre.

CRIMSON CLOVER (Trifolium Incarnatum). An annual variety in common use in Italy and Southern France for feeding green. Also largely grown in this country in Virginia. A good portion is now being used in Texas and adjoining states. Two to four

weeks earlier than the red clover, and for that reason being more desirable. Immense yielder of fodder. Commences to grow at once after cutting and continues to do so until after frost. Height 1 foot; roots nearly black, and blossoms long and of deep carmine color. Makes good hay. Sow in the fall in southern country. Sow 15 pounds to the acre.

BURR CLOVER (Medicago Maculata). Is used mainly in the southern states and California. Fills in the season when other forage plants have become dried up by the summer heat. Stock of all kinds feeds upon the burrs, which contain a large portion of nutritious matter. Sow 15 to 20 pounds per acre in August, September or October.

JAPAN CLOVER (Lespedeza Striata). Low, perennial, spreading habit. Stands excessive drought well; flourishes on poorest soil in southern states. Sow 15 pounds per acre. It makes a fair hay, and stock eat it readily when green. It is also valuable for turning under as green manure. Sow in spring broadcast at the rate of 30 pounds per acre.

#### DWARF ESSEX RAPE (BRASSIEA NAPUS)

Rape should be sown in July, August or September. It makes a large-yielding, nutritious, succulent green feed or pasturage all through the fall, winter and early spring. The fattening properties of rape are said to be very much better than those of clover: it makes a first-class crop, either sown alone for grazing during late summer and fall, or sown with crimson clover. Rape can be successfully sown in the spring as well as the early fall; early fall seeding, however, gives the best results. Rape is best sown in drills at the rate of 3 to 5 lbs. to the acre, or it can be sown broadcast, when from 6 to 8 lbs. to the acre should be used.

#### MAMMOTH RUSSIAN SUNFLOWER

Produces enormous heads, measuring 15 to 20 inches in diameter. Seeds are highly valued by all who have tried them as an excellent and cheap focd for fowls. May be planted on a waste piece of ground any time, early spring until middle of July, at the rate of 3 quarts to the acre. The thick stalk may be used for fuel.



Dwarf Essex Rape

#### A PERMANENT PASTURE

Nothing is more valuable to a farm than a permanent pasture. A good pasture can be made by sowing broadcast Burr Clover and Rescue Grass Seed, as early as possible in the fall, not later than November 20th, about ten pounds of seed of each per acre. In April or May the following season after the Rescue Grass and Burr Clover have seeded, disc the land and plant two to three pounds of Bermuda Grass Seed per acre. If you haven't a pasture of this kind and have not sown the Burr Clover and Rescue Grass Seed in the fall of the year, we advise that you disc your land in the spring and sow Bermuda Grass. You can then disc in the Rescue Grass and Burr Clover next fall, as the plowing of the land will not kill the Bermuda and it will come up the succeeding spring.

### LAWN AND PASTURE GRASS SEED

Sow 1 lb. to 150 square feet.

The essentials for a fine lawn are: First, a rich, well drained soil; second, careful preparation of the ground, making it as fine and smooth and mellow as possible; third, a wise selection of seeds; fourth, sowing at such a time as to give the young plants a chance to become well established before being subjected to very dry or cold weather or to the direct rays of the hot summer sun. However, much care is bestowed on the soil and seed, no lawn will be beautiful without frequent mowing and rolling. Too much care cannot be given to the selection of grasses, as some varieties are the most luxuriant in spring, others in summer, others again in autumn and a combination of the proper sorts is required for a perfect, carpet-like lawn. It may be planted early in spring or fall and should be sown at the rate of sixty to one hundred pounds per acre; much more is required than for hay or pasturage. If sown in the spring, sow as early as possible.

FINE MIXED LAWN GRASS A thoroughmixture made of the best and cleanest grades of those varieties used and best adapted to general lawn purposes.

SHADY LAWN MIXTURE This is a segrasses which thrive under the shade of trees or buildings where there is little sun.

GOLF LINKS MIXTURE Made up from yarieties of grasses perfectly adapted to rough usage. Will produce a beautiful, thick, tough lawn in a short time, and will maintain its appearance better than others in spite of wear and dry weather. For Golf Links this mixture is equal if not superior to many Golf Link grasses now in use.

KENTUCKY BLUE GRASS (Poa pratenclean. Sometimes called June grass, but the true June or wire grass is much inferior. Kentucky blue grass is the most nutritious, hardy and valuable of all northern grasses. Sown with white clover it forms a splendid

lawn; for this purpose use not less than fifty-four pounds of blue grass and six pounds of white clover per acre. If sown by itself for meadow or pasturage use about twentyeight pounds per acre.

CANADIAN BLUE GRASS A large perennial with creeping root-stalks which form a strong turf. It withstands drought better than most cultivated grasses and is especially valuable in lawn grass mustures. Succeeds best on clay sods. For hay or pasture it is best sown with other grasses. Height 6 to 20 inches 1 lb.

PERENNIAL ENGLISH RYE (Lolium Perenne). While steemed in Europe and Australia, it has but recently been recognized by our western ranchers. It is worthy of all the praise given. As a pasture grass it grows thick and withstands drought reasonably well. We have reports of its success as far south as Mexico City and in the far West, also in Old Mexico it is used extensively for lawns. Our new crop is carefully cleaned, and may be depended upon. For pasture sow in spring 25 to 30 pounds to the acre. For lawns 60 to 75 pounds to the acre.

ITALIAN RYE (Lolium Italicum). Surpasses the perennial rye grass in earliness and nutrition and rapid growth. Indispensable for alternating. Lasts only two years, and of no use for permanent pasture. Par-



ticular as to soil, a moist, tenacious, fertile and of medium consistency being considered the best. On such it is considered one of the best grasses cut green. Sow 30 to 40 pounds to the acre.

#### MEADOW FESCUE OR ENGLISH BLUE GRASS

(Festuca Pratensis). Especially adapted for permanent pasture. Grows 2 to 3 feet high, but not in tufts like orchard grass. Earliest and most nutritious of grasses. Makes good hay; cattle thrive on it whether in dry or green state. Succeeds even on poor soils, and as the roots penetrate deeply from 12 to 15 inches, it takes extremely dry weather to affect it. Will stand more freezing than any other variety, and yields an abundant crop of seed. Heretofore has been sown to but a limited extent, but the area is rapidly increasing each year. Sow 15 to 20 lbs. per acre.

TALL MEADOW OAT (Avena Elatior). The roots of this descend deeply into the subsoil, enabling it to withstand a protracted drought, and it is green all seasons of the year. Its early growth in spring makes it equal to rye pasture. It grows quickly after mowing, giving a denser and more succulent aftermath than any of the present popular cultivated grasses. Sow broadcast 25 to 30 pounds of seed to the acre.

#### LAWN AND PASTURE GRASS SEED-Continued

RED TOP GRASS This is especially valuable for sowing on sour or acid soils, swampy or meadow lands liable to overflow, and also on soils that are not rich enough for timothy and other grasses or clovers. Mixed with alsike clover it makes a fine crop of hay or excellent pasture. Red top makes a very dense sod that will stand trampling and will continue to grow for a longer time during the year than almost any other grass.

On good soil it will grow two feet high, but it should be fed close, as when it grows up to seed cattle do not like

Fourteen pounds of solid seed should be sown per acre and it may be sown either in the spring or in the fall and with or without some small grain as a nurse crop.

To make the best quality of hay it should be cut when in full flower. It is more easily cured than any other grass.

BERMUDA GRASS (Cynodon Dactylon). This grass has long been naturalized in the southern states. While it will not stand extreme freezing, it resists dry, hot weather and consequently is a valuable grass to grow over and bind the most arid and loose soils; and will grow luxuriantly in every kind of soil. It is val-

uable for lawns, pasture and as a hay crop. Should be sown from April to June. Is used almost exclusively for lawns in the South. Sow 3 to 5 pounds per acre.

CREEPING BENT GRASS (Agrostis Stolonifera). Especially recommended for lawns in country homes, depending on irrigation. It flourishes where but little moisture is available. Very good for terraces and sloping ground.

ORCHARD GRASS (Dactylis Glomerata). No farmer should be without a small field of orchard grass as in many respects it is superior to all other grasses. It stands the drought, grows well in the shade, does well in wet or poor ground and is splendid to prevent worn out fields from washing. This grass furnishes excellent pasture three weeks before any other and after close grazing ten days' rest is sufficient for another growth. Cows fed on this will produce more and richer milk than on blue grass. It makes a very heavy sod and when well set remains for many years. It is especially adapted for winter grazing, as it remains green all season. It is well suited to sow mixed with alfalfa; an average of 12 lbs. orchard grass, 6 to 8 lbs. alfalfa seeds. Sow 20 to 25 lbs. per acre.

### SUDAN GRASS SEED (Andropogon Sorghum var.)

SUDAN GRASS HAS COME TO STAY GROWING THE CROP. It may be grown either drilled, in cultivated rows, or broadcast. If planted in cultivated rows, the rows should be as close as possible, and yet permit of easy cultivation. In thirty-inch rows, two to three pounds of seed per acre is ample; and, under conditions of very low rainfall, this method is recommended. Under humid conditions, 18-inch rows are preferable, and five pounds of seed per acre are sufficient. For drilling or broadcasting, 15 to 25 pounds of seed per acre, depending on rainfall, should be used. The seed should not be sown until the ground is warm, that is, about the time for planting corn. The young plants will withstand slight frosts without injury.

HARVESTING THE CROP. The hay should be cut as soon as the grass is fully headed, and early cutting is especially advisable where two or more cuttings per season are expected. The grass can be cut with a mower, but more conveniently with a binder, especially in dry regions, as the hay cures very readily in bundles.

Sudan grass has without doubt solved the hay question wherever it can be grown. Our farmers are looking for a crop with both a beeding value and a market value. This country has never produced enough hay. Good hay always brings splendid returns. Hay is the best forage and the most convenient to handle. Sudan grass is a great hay-producing crop, both in quality and yield.

SUDAN GRASS IS WITHOUT DOUBT THE GREAT-EST DROUGHT-RESISTANT FORAGE CROP KNOWN. At the same time it does not blight where the moisture is heavy, and under good seasonable conditions it yields a larger tonnage of hay per acre than any other crop known. It recovers rapidly after cutting and the next crop is usually ready for harvest within thirty days from the first cutting.

It is an annual plant, and taking into consideration the value of the forage, hay and seed, it will soon be recognized as one of the most profitable crops.

Last year was the first year that we had seed to offer our customers in any quantities, but we have had large quantities of this seed grown for us this season—seed that has been especially grown and saved for planting purposes.

JOHNSON GRASS (Sorghum Halepense). Don't plant this unless you intend to keep it on against planting this seed, but this is not true as far as we know. The grass can be killed out by constant cultivation, by plowing the ground during extremely hot weather or in the extremely cold weather and then planting the ground in a crop that needs a good deal of cultivation.

This grass has long been avoided by farmers who know it, but they are now coming to know its value as a hay crop. Johnson grass hay is staple on any market in many sections of the country, always brings a splendid price, right next to prairie hay. The ground should be well plowed and harrowed and the seed harrowed in. It requires about 15 to 20 pounds to sow an acre. This is a perennial grass with long, cane-like roots which spread very rapidly.

RHODES GRASS Many planters claim that it is the greatest asset for all South and Southwest Texas, the Gulf Coast of Louisiana, Alabama and Florida, that has ever been found. Rhodes grass will not freeze out unless the temperature gets down to about 15 degrees above zero, therefore, it is a permanent pasture



Sudan Grass.

#### SUDAN GRASS SEED—Continued

and hay meadow as long as it does not freeze. We recommend sowing from 7 to 10 pounds to the acre. Most varieties of grass seed are slow to germinate. Rhodes grass is not a pest and can easily be disposed of.

It should be planted broadcast on well pulverized soil in February, March and April, and a drag of brush or very light harrowing to follow planting. The seed are very light and cannot be properly distributed except on a very calm, windless day. It requires from three to six weeks to germinate. Seed grown north of 27th degree of latitude will not germinate.

RESCUE GRASS Finest grass for winter pasture in the South. It grows best on a rich, loamy soil, and will do well in somewhat shady locations. To secure the most satisfactory results, the land should be well plowed and the seed harrowed in, using from 30 to 40 pounds per acre. Sow in August or September, so that the seed may be ready to germinate as soon as the fall rains come. In case of a dry autumn the crop will be late, but under favorable conditions a heavy stand will be produced, furnishing good pasture from December to April or May; or, if the sowing is desired for hay, sometimes two crops may be secured. The grass is naturally an annual,

producing its seed and then dying, but if prevented from seeding by continuous cultivation or pasturing, it will survive several years and produce well. As the grass dries up during the summer, the use of the land during that period is practically lost. The most generally satisfactory method of growing this grass is to pasture it until spring and then let it reseed itself. About fifteen days are required for the seed to germinate.

After it has matured its seed the land may be plowed and sown, preferably to cowpeas or Japan clover, which should be harvested in time to allow the Rescue grass to start again with the first autumnal rains. Excellent volunteer crops may be secured in this way for several years.

TIMOTHY If sown with clover, use Mammoth or Sapling, as the Red Medium will ripen about three weeks before the timothy. Sow 12 to 15 pounds per acre.

TIMOTHY (Phleum Pratense). This is the most valuable of all grasses for hay. Thrives best on moist, loamy soil of medium tenacity. It should be cut just when the blossom falls. Sow early in the spring or fall, at the rate of 15 pounds per acre, if alone, but less if mixed with other grasses.

### MILLETS

To grow millet

for hay it should be sown broadcast at the rate of fifty pounds per acre. If sown for seed purposes it should be sown very much thinner, so as to allow the millet to grow larger and the heads to develop. To have best results with millet, it should be sown on good, rich upland, containing a good amount of plant food. If will not grow satisfactorily on thin, gravelly ground, in poor, sandy soils, unless considerable fertilizer is used, or give satisfaction on cold, damp land.

The best time to plant millet is from April to August. The ground should be thoroughly broken and made smooth with harrow, or by rolling the land. For hay it should be cut while the seed is in the milk as, when the seed matures, it is not good for stock. It is easily cured, requiring only one day's sun to put it in condition. Two crops can be grown on same land if desired.

A FEW WORDS ABOUT QUALITY There is probably no other kind of field seeds where quality is more difficult to

judge than in millets. Seeds of the small or common millet may look just as good as those of the Big Golden millet, but how different will be the resultant crop! We have handled millet seed for years; studied it, and are better posted as to the different grades of millet than the average dealer.

JAPANESE MILLET Entirely distinct. It grows 6 feet, yields 10 tons green fodder per acre. When cured, it makes an excellent quality of hay, and is a much relished green fodder. Cure as you would a heavy crop of clover. It may be sown from the middle of May to the first of July, broadcast at the rate of 15 pounds per acre, but it is better to sow it in drill, 12 to 18 inches apart, using 10 to 12 pounds per acre, and cultivate until 15 inches high, when its rapid growth will smother all weeds.

PEARL OR CAT-TAIL MILLET (Penicillaria). Pearl millet is valuable as a continuous-cutting forage plant. Grows from 10 to 12 feet high, but can be cut when the plant is 3 to 4 feet in height, when it will stool out and make a tremendous growth, which can be cut three or four times during the season. It is excellent for dairymen or anyone wishing green feed through the summer, as it can be cut as desired until killed by freezing. Sow 5 pounds to the acre in drills 3 feet apart, or broadcast 25 pounds to the acre. It should not be sown before May, as it requires warm weather to germinate and do best.

FANCY GOLDEN MILLET We offer the large headed Golden millet of the purest and best strains to be had. When grown for hay plant one-half to one bushel per acre, either broadcast or drilled When planted for seed use half quantity. Make a good seed bed before sowing millet.

CHOICE GOLDEN MILLET

This is the standard grade usually sold and not up to the standard of our fancy.

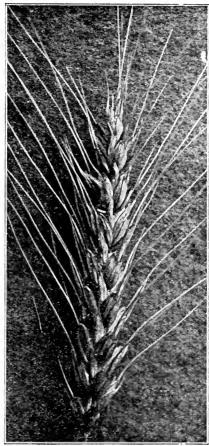
#### SPELTZ OR EMMER

Grows tall like rye and matures early like barley. Makes an enormous yield of grain and straw. All kinds of stock will eat it greedily. The straw is considered by a great many to be nearly as good as hay. Makes good pasture. It stands drought better than other grain. Sow at the rate of 75 to 100 lbs, per acre in fall or spring.

#### BLACK WINTER EMMER

Winter Emmer is a comparatively new and unknown crop in the Southwest.

Emmer has been grown to a considerable extent in portions of the United States for 15 to 20 years. Emmer is different from Speltz; a species of wheat, plants are hardy, leaves rather broad, velvety and hairy. Heads bearded. very compact and much flattened at the rowed sides. Emmer is resistant to drought and rust. Produces a fair crop under almost any condition of soil or climate, but thrives best in dry regions with hot summers. where it gives excellent yields. At the Kansas Experimental Farms tests were made of Winter Emmer for four years with results of an average of fiftytwo bushels per acre. Winter Emmer is particularly valuable as a



Emmer

stock food in dry countries for the reason that the drought is too great for ordinary crops of oats and barley, but not sufficient to prevent the production of a fair crop of Winter Emmer.

Emmer is used for feeding live stock and compares very favorably with oats and barley for that purpose. Where oats do not do so well, Winter Emmer is highly recommended. Preparations of the land, seeding and subsequent management of the Winter Emmer crop are practically the same as required for winter wheat and the same farm machinery is used. Sow emmer in September or Oc-

tober at the rate of two bushels per acre. The straw from emmer is equal to any oat straw, and when cut for hay is even better. If wanted for hay, should be cut when the emmer is just in the dough. Thirty-two pounds of emmer is a bushel.

#### VETCH

Vetch is another splendid variety of forage plant and is rapidly gaining popular favor with farmers and stock raisers throughout the country. It is very hardy, is valuable as a winter cover crop to prevent leaching and for forage and fertilizing purposes. It is an annual but resows itself and will come up year after year on the same ground. It grows well on nearly all soils and thrives surprisingly on poor, light land, and will endure extremes of drought, heat and cold. It improves the soil, being a great nitrogen gatherer, the roots bearing innumerable nodules of nitrogen gathering bacteria. These take the nitrogen from the air and restore it to the soil where it is so much needed. It is related to the pea family, but the vines are much longer and the foliage more abundant. There are two varieties commonly used in this country. Hairy Winter and Oregon Vetch.

HAIRY OR WINTER VETCH May be sown either in spring or fall. For fall planting should be sown in August or September; it will cover the ground before frost and make a valuable winter forage crop. When sown in April and May it is ready to cut by July; the second growth will make excellent pasture for late summer and fall use. Sow 50 to 60 pounds of vetch with same amount of oats, using the oats for supporting the vetch.

OREGON VETCH About the same as Hairy Vetch only that it is sown only in the spring.

#### SPRING BARLEY SUCCESS BEARDLESS

The earliest barley in cultivation. Grows about as high as common barley, but has stiffer straw, which enables it to stand up well on any soil. It yields immensely. On good soil it has produced 80 bushels per acre. It is of excellent quality for both malting and feeding hogs. Although barley has proven a most profitable crop, farmers have been reluctant to grow it on account of the long, harsh beard, which proves very annoying in threshing. This disadvantage is entirely eliminated in this variety, as it is absolutely beardless and is as easily handled as oats.

WINTER BARLEY This is the hardiest and most prolific barley grown, yielding from 50 to 75 bushels of grain per acre. The heads are long and bearded and berries are large. It makes one of the best pastures for fall and winter grazing. As it is not quite as hardy as winter wheat, it should be sown as early in the fall as possible to insure a strong growth before very cold weather. It matures 8 to 10 days earlier than winter wheat. Sow about 80 to 90 pounds.

#### RYE

This valuable grain is justly becoming more popular every year. Farmers, dairymen and stock raisers are appreciating more the value of rye as a winter pasture crop. After several weeks valuable grazing you can take stock off of rye and get a good yield of grain for which there is always a ready market. Every farmer should plant some rye, as it will often make a good crop when wheat is an entire failure. Sow at the rate of 1 to 1½ bushels per acre.

### **SELECTED SEED OATS**



We take a great deal of pride in the quality of the seed oats which we offer to our trade. They are always carefully selected and recleaned.

EARLY WHITE CHAMPION This is a well known and popular variety throughout the central states and Northwest. It ripens early and yields abundant crops.

WINTER, OR TURF A southern favorite for fall planting, being used for winter pasturage, as well as the grain. Also popular for spring sowing. Sown early, they will outyield spring oats, though not maturing so quickly as if sown in fall.

RED RUST PROOF Standard winter oat, highly esteemed in the South, maturing quickly, and making large yields.

FULGHUM OATS This is a strain of the Red Rust Proof Oats grown more especially for its earliness; maturing as it does some two weeks ahead of the native strains enables you to have them cut before the native oats mature and reaching the market two weeks earlier command better prices.

Fulghum Oats also make excellent winter pasture, as they have an unusually heavy hay and do not winter-kill readily. It is a remarkable rust resistant and hardy in every respect.

WHEAT

BLUE STEM This variety has no beard and is very productive. The green stems have a beautiful blue color which disappears as the wheat ripens, when the stems and straw assume a golden-yellow hue. It is free from rust and its kernel is hard.

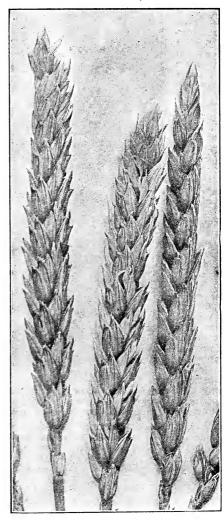
MACARONI WHEAT "Kubanka." The wheat for dry farming. This wheat leads all others for our western country as it not only resists extremes of weather, but will mature a good crop where other kinds fail entirely. It grows so rapidly and strong as to get well ahead of the weeds and does well on poor ground. The berry is very hard, glossy and large, and will weigh as much as 63 lbs. per bushel. The head is com-

pactly formed and bearded, the straw is very strong, the grain does not shell or bleach and this wheat is so hardy as to be almost smut and rust-proof. Not very desirable for milling, but enequaled for feeding.

RED MAY WHEAT We have never been able to see where this variety was any earlier and better than the Blue Stem, although many prefer it to that variety, claiming great earliness. It's a standard variety and a great favorite in the state of Tennessee.

BUCKWHEAT, SILVER HULL A great improvement over the original, old sort, yielding nearly double the quantity per acre, blooming longer and maturing sooner. Grains are a beautiful light gray color, have thin husks and less prominent corners than those of the other sort. The flour is of good quality and very nutritious.

JAPANESE We can also furnish this variety to those of our customers who prefer it.



### SAFETY INCUBATORS FIRST

No. 0-50 (60) Safety Hatch Incubators\$	12.00
No. 1-100 (120) Safety Hatch Incubators	15.00
No. 2-150 (175) Safety Hatch Incubators	
No. 3-200 (240) Safety Hatch Incubators	21.00

ALL WHO OWN SAFETY HATCH INCUBATORS ARE SATISFIED WITH THEM. THE ASSURANCE OF SATISFIED WITH EVERY PURCHASE. WRITE FOR CATALOG

"Its hinged top is a great thing when it comes to cleaning and disinfecting."

"The best and easiest operated machine I ever used."

"From 156 duck eggs we have hatched 154 ducks."

"I have just hatched out fifty-nine chicks out of sixty pullet eggs."
"Have hatched over 400 chicks and never lost over two per cent."

"Your 175-egg size incubator has proven the best investment I ever made."

"I consider the Safety Hatch Incubator the best made."

"I am thinking of getting another Safety Hatch this fall. I can attend to both as well as one."

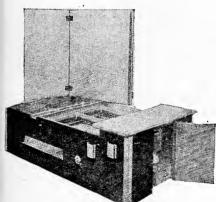
"I like it better than any incubator I ever saw."

"I set 114 eggs and got 110 chicks and they are all doing fine."

"We run six incubators and the Safety Hatch gets us more strong, healthy chicks than any of the others."

"This year I shipped out over 12,000 chicks and hatched 2,000, for myself and neighbors. They seem to hatch by themselves with no effort at all."

"The lamp and door of the Safety Hatch are the best and least trouble to operate of any I have ever seen."
"I believe I can now take the Safety Hatch and with good eggs hatch 95 per cent, at least."



Hot Water Brooder

### THE SAFETY FIRELESS BROODER

Shipping Weight 45 Pounds-First Class Freight

Our Washing Machine Factory and the high standard we maintain permits us to make a by-product that brings about a generaus saving to you. Here is the story:

Staves that go into our washing machines must be as perfect in finish as it is possible to obtain. Those with slight defects are placed in a separate pile and we thus gather together the material for our Fireless Brooder. It is the same size as the "one minute" washing machine tub and offered to you at a great saving. This Safety Fireless Brooder will comfortably accommodate 50 to 75 chicks. In warm weather it can be placed near a coop where the chicks may run about. In severe weather it is well to place a jug of warm water in the center of the brooder to insure the chicks against the chill.

The brooder has substantial handles and is topped with a snugly fitting galvanized lid. Suitable allowance is made for ventilation. Inside is a hovering cloth—as shown in the upper picture. This is easily removed to clean the brooder, and can be arranged to cover all or part of the floor space, as the weather demands. We have given the Fireless Brooder a thorough trial and know it to be efficient as well as inexpensive.

Retail price, \$5.25.

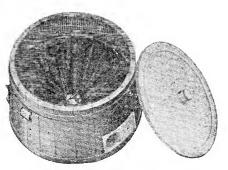
### THE SAFETY HOT WATER BROODER

IS AS NECESSARY TO THE SUCCESSFUL POULTRY RAISER AS AN INCUBATOR—WEATHER, VARMINT AND COLD PROOF

Shipping Weight 135 Pounds-First Class Freight.

THE SAFETY HOT WATER BROODER IS A REAL BROODER. It can be operated out of doors, in a barn or shed, or most any place. It is weather proof, varmint proof and Cold proof. The floor is built high enough from the ground to keep the chicks above the possibility of flood water, heavy rains or cloud bursts. It has the patented copper coil heat circulating system, the same as our Safety Hatch Incubator. Hot Water Circulation is the best and safest heat for incubators and brooders.

THE LAMP SETS INSIDE of its own private compartment, which is so arranged that the fumes from the lamp escape through the top without the slightest possibility of coming near the chicks. The lamp compartment has an outside door, very convenient to the operator. While the



Fireless Brooder

#### THE SAFETY HOT WATER BROODER—Continued

Safety Hot Water Brooder does not require anything like the quantity of oil consumed by an incubator, yet it is mighty good policy to watch your lamp occasionally and see that the temperature is kept plenty high.

THE AIR CHAMBER OR SUN ROOM is out from under the heating coil far enough that when the air vent window is left open, there is no danger of suffocation, no matter how high the temperature. The chicks can and will scatter out into this section should the outside temperature raise sufficient to raise the temperature above 85 or 90 degrees in the hover compartment under the coil.

A HEAVY CLOTH CURTAIN IS HUNG between the hover room and the sunning and feeding room. This is always in place, yet does not interfere with the chicks passing in and out. Immediately under the soil is placed a hover cloth in such a way as to give an equal distribution of heat and come in contact with the little chicks, giving an imitation very near that of the mother hen. This cloth prevents any tendency of the little chicks piling up.

THE SAFETY HOT WATER BROODER is constructed of the best materials, by high class workmen, and is absolutely sure to please the most exacting. Complete with Safety Brooder Lamp Bowl, Chimney, Funnel, Tubular Tank, Chick Fount, Lamp Burner, Thermometer and book of directions. Retail price, \$16.50.

THE BEST OIL IS NONE TOO GOOD FOR THE CHEAPEST INCUBATOR AND BROODER.

### **POULTRY FOODS**

#### BELL BRAND CHICK FOOD

Chicks properly started on a good, wholesome food are the ones that reach maturity.

"Bell Brand" Chick Food is the right food for chicks, mixed ready for use, comprising the proper proportion of cracked grains and small seeds, grit, shell, bone, and beef scraps (to take the place of worms and bugs); charcoal to promote digestion, all combines to produce a quick and profitable growth without loss by disease and weakness caused by ordinary foods.

Begin feeding "Bell Brand" Chick Food after the youngsters are 48 hours old, scattered in straw for exercise.

Put up in  $8\frac{1}{3}$ , 50, and 100-lb. bags.

#### BELL BRAND HEN FOOD

If hens are not laying, the younger birds not growing as fact as they should, and chickens are drooping and practically a worthless expense on the premises, it is probably because they are fed unclean, musty grain which, having an undesirable influence on the fowl's health, is a most expensive food and of little real value.

"Bell Brand" Hen Food is a recleaned, uniform mixture of grain, seed and shell, and properly proportioned to meet needs of a thriving fowl.

Put up in  $8\frac{1}{3}$ , 50 and 100-lb. bags.

#### **BIRD SEED**

Hemp, Canary, Rape, Sunflower, Millet, Spratt's Bird Manna. We carry a full line of Bird Cages.

#### PIGEON FOOD

Canada Field Peas.

#### BELL BRAND CHARCOAL

Specially prepared for poultry feeding. Purifies the blood, prevents disease and is a splendid remedy for sour crop, diarrhoea, etc. A little of it goes a long ways, and no poultryman should be without it. Do not confound this with ordinary charcoal.

#### BELL BRAND GRITS

It is an established fact among poultrymen that in order to make the poultry business a success a first-class

grit must be used. Ordinary water-washed, smooth pebbles are not "grit." Grit must have a formation which enables it to retain its grinding qualities under the relaxation and contraction of the gizzard.

"Bell Brand" Grits is all this and more.

Medium and coarse.

#### BELL BRAND OYSTER SHELL

As egg shell contains a large percentage of lime, it is important that you keep the fowls well supplied with this substance in one form or another. "Bell Brand" Oyster Shell supplies this necessary material in a most satisfactory manner and is low in price.

Fine, medium, coarse.

#### "SPECIAL" BEEF SCRAPS

Rather finely ground. Considered the best on the market.

#### **BLOOD MEAL**

Pure Blood Meal fed your poultry will make your hens lay, your chicks grow fast and keep your fowls healthy. It contains no ground bone or cheap adulteration of any kind, and is the most complete poultry and egg food in use.

DIRECTIONS—It should be fed at the rate of about three times a week, composing one-tenth part of the mash.

#### FINE GROUND BONE

For mixing once a day with soft feed this is unsurpassed.

DIRECTIONS—It should compose about one-tenth part of the daily mash.

#### CRACKED POULTRY BONE

Manufactured from fresh, clean bones, perfectly pure and sweet.

DIRECTIONS—Should be fed to the poultry daily, about a handful to every five fowls, like grain or any other feed.

#### MEAT AND BONE

Consists of meat scraps, bone and dried blood, cooked under steam pressure, and dried and ground; sweet, clean and good. Excellent.

#### POULTRY FOODS—Continued

DIRECTIONS-It should be fed at the rate of about three times a week, composing one-tenth part of the mash.

#### MEAT MEAL

This is a true egg-producing, flesh and bone-forming food, and supplies just what laying hens and growing chicks require.

D!RECTIONS-It should be fed at the rate of about three times a week, composing one-tenth part of the mash.

#### DISINFECTANTS

CONKEY'S NAPCREOL-A fluid disinfectant and deodorant. Unexcelled for disinfecting poultry houses and runs, stables, dog kennels, toilets, or any place where a good germ or odor destroyer is needed. One gallon will make 100 gallons of disinfectant.

CONKEY'S LICE PAINT-A scientifically compounded liquid preparation for use, primarily, in killing lice, mites, and other parasites on fowls. The vapor which arises from the liquid does the work. It is applied by a sprayer on roost and dropping boards, not on the fowls.

CHINA NEST EGGS. MEDICATED NEST EGGS.

#### SPRAYS

No. 112. Special, tin. No. 115. Continuous, tin.

No. 118. Midget, tin.

#### FRUIT BOXES AND BASKETS

Leslie Quart Berry Boxes. 24-Quart Crates, for berry boxes. 4-Basket Crates, complete.

Gallon Baskets.

1/2-Bushel Drop Handle Picking Baskets.

1/2-Bushel Diamond Split Baskets. 1/3-Bushel Diamond Split Baskets.

1/4-Bushel Diamond Split Baskets.

Tacks for berry boxes.

#### AUTOMATIC FOUNTAIN AND CHICKEN FEEDER

Patented Jan. 7, 1919.



This appliance for chicks feeds water, grain, grit, etc., automatically. It is an absolutely sanitary fountain made to fit any half-gallon, quart or pint Mason jar. We do not furnish jars. Pan is hinged to the wire so that it is not necessary to remove the jar in order to refill it.

Shipping weight, 6 oz.

#### CHICK GRIT AND SHELL BOX



Growing chicks should have grit, oyster shell and charcoal always before them; and for this purpose our Chick Grit and Shell Box is indispensable.

It is made of galvanized steel with three compartments.

Height,  $7\frac{1}{2}$  inches; width, 6 inches, depth (front to back), 4 inches at bottom, and 2 inches at top.

Price ......60c Shipping weight 2 lbs.

Large size for grown fowls.....\$1.00 Shipping weight 4 lbs.

#### AUTOMATIC CHICK GREASER

EVERY CHICK HIS OWN DOCTOR

Patented March 24, 1908.

It is the large lice which collect on the heads of young chickens which cause them to droop and die: and formerly the only way to get rid of these lice was to catch every chick and rub



grease on its head; but this slow, tedious process is not necessary since the invention of the AUTOMATIC CHICK GREASER.

The wick around the upper part of the greaser is saturated with oil (a mixture of two-thirds lard and one-third kerosene or black oil) and every chick which eats out of the pan will get its head thoroughly greased in a very few minutes.

Price of Automatic Greaser.....\$1.00

Shipping weight 2 lbs.

#### CHICK FEED TROUGHS

These troughs are very convenient for feeding flocks of growing chicks.

The trough is made cn a half circle so that every bit of feed can be easily eaten out of it.



Over the trough is a gable shaped grate which prevents the chicks from getting into it and wasting or fouling the feed. This grating is a separate piece and slides on and off easily. It is stamped into shape with dies, and is ribbed as shown in the cut, making it strong and substantial.

Made in two sizes, 10-inch and 20-inch. 10-inch trough with grate......35c Shipping weight 11/2 lbs.

20-inch trough with grate......50c Shipping weight 2 lbs.

IF YOU DO NOT HAVE OUR LATEST PRICE LIST-WRITE US.

#### ROUND PIGEON AND CHICK HOPPERS



Made of galvanized steel and the galvanized wire grating is adjustable, up and down, to regulate the feed, which is automatic.

A neat, practical, and durable hopper. Height, 131/2 inches; diameter of hopper, 71/2 inches; diameter of pan,  $10\frac{1}{2}$  inches.

Price, each . Shipping weight, 8 lbs.

#### AUTOMATIC FEEDER AND EXERCISER FOR POULTRY



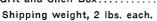
The Economy Exerciser and Feeder (Pat. Jan. 18, 1916) is different in construction and operation from all others. The pendulum rod is operated by three chains and the fowls get the grain by scratching which gives them exercise in the natural way, and the grain distributor has very accurate adjustment, so that you can make them work just as long and just as hard as you wish for their feed. It is equally good for old and young chickens and used either with litter of any kind or on the bare ground or floor.

Chickens can operate it as soon as they are large enough to eat wheat or cracked corn.

	MADE IN TWO SIZES	
No. 1.	Capacity, one-half bushel\$	3.75
	Shipping weight, 30 lbs.	
No. 2.	Capacity, one bushel\$	4.50
	Shipping weight 40 lbs.	

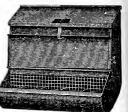
#### STANDARD GRIT AND SHELL BOX

This Grit and Shell Box has slanting front. inclined top and round bottom to trough. Just the thing to hold oyster shell, charcoal and grit for a small flock of fowls. Price of Grit and Shell Box.....\$1.25



## BABY CHICK FEED HOPPER

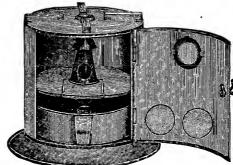
This hopper is made of galvanized iron throughout. It is designed especially for feeding baby chicks. The hopper is 8 inches in height and about 23/4 inches wide. It is made with an adjustable swinging front that eliminates any possibility of clogging.



10-inch size .... Shipping weight, 3 lbs. 20-inch size ..... .....\$1.50 Shipping weight, 6 lbs.

#### THE O. K. HEATER FOR DRINKING FOUNTAINS

To keep the drinking water for your fowls always warm through the cold weather, it is necessary to supply some heat. The O. K. Heater is made to meet this requirement, and is suitable for any kind of drinking fountain, and for any size up to four gallon capacity. The heater is 10 inches in diameter, and stands 10 inches high; and the base is 13 inches in diameter.



This heater can be used anywhere with perfect safety, as it has an O. Safety Lamp, the door fits tight and is fastened securely, and the base is very broad, making it stand firmly so that the fowls cannot overturn it.

The Lamp has a large oil fount holding sufficient oil for several days. The burner is No. 1 size, as only a very small flame is required. O. K. Heater Complete with Lamp.....\$2.50

Shipping weight, 8 lbs.

#### GALVANIZED STEEL HENS' NESTS

These metal nests are made in three compartments to either rest on a shelf or other support or hang against a wall.



They are convenient, sanitary, and vermin proof. Each nest or compartment is 11 inches wide, 13 inches deep from front to back, and 1234 inches in height at the back.

Shipped either set up or K. D. Price, 3-Compartment Nest.....\$3.00 Shipping weight, crated, 30 lbs.

PRICES DO NOT INCLUDE POSTAGE, EXPRESS OR FREIGHT CHARGES.

#### IMPROVED HANDY HOPPER

The Improved Handy Hopper is made of galvanized iron throughout. All parts are spot welded together. It is provided with hinged lid over both hopper and trough, making it rat and mouse proof, as well as dirt proof.

It is provided with a swinging front, adjustable to suit any kind of dry mash and which eliminates any possibility of clogging.

Hopper is 15 inches in height and  $4\frac{1}{2}$  inches in width and made in four lengths.

No. 1.	12	inches in length\$1.60 Shipping weight, 8 lbs.
No. 2.	18	inches in length\$1.90 Shipping weight, 10 lbs.
No. 3.	24	inches in length\$2.40 Shipping weight, 12 lbs.
No. 4.	36	inches in length\$3.25 Shipping weight, 17 lbs.

#### DEVELOPER MASH FEEDER

This hopper was designed for growing chicks, after they are large enough to be taken out of the baby chick class.

It is a metal feeder with a ½-inch mesh hardware cloth over the front to keep from wasting the feed. It is to be hung on the wall at the right height for the chicks.

No. 1. 15 inches in length......................\$1.00

Shipping weight, 3 lbs.

No. 2. 30 inches in length......\$1.50 Shipping weight, 5 lbs.

## THE OAKES LAMP HEATED SECTIONAL GRAIN SPROUTER

This Sprouter is made of No. 26 galvanized steel. The walls are lined with rubberoid roofing, causing the heat to be retained in the Sprouter. The grain trays are 18 inches square and the bottoms of these trays are

perforated. This enables the moisture to pass through the grain easily, and also allows a free passage of air, which keeps the grain from moulding.

This Sprouter is well ventilated and is absolutely rat and mouse proof.

The top is also perforated allowing the air to pass out without difficulty. The top is removable, enabling the grain to be moistened easily.

The doors are provided with glass, which allows plenty of light, to stimulate the growth of the grain.

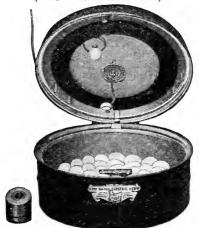
The Sprouter is equipped with an Oakes O. K. Lamp, and it requires only a very small flame to heat it.

The base of the Sprouter contains two grain trays and a moisture pan and each of the sections contain two grain trays.

Capacity	of Base:	one-fourth bush	el; (30 hens).
Price	· · · · · · · · · · ·		\$10.00

 THE OAKES ELECTRIC HEN-INCUBATOR AND BROODER

(Two Machines in One)



THE OAKES ELECTRIC HEN

The Oakes Electric Hen consumes about as much electric current as one 25-wat lamp, and in a room of ordinary temperature, the current is on only about one-quarter of the time.

These machines are furnished for either 32 volt or 110 volt currents.

60-Egg Oakes Electric Incubator, complete with thermometer, hover-curtain and legs, price.......\$16.50 Shipping weight about 25 lbs.

100-Egg Oakes Electric Incubator, complete with thermometer, hover-curtain and legs, each.....\$22.50
Shipping weight about 40 lbs.

18-inch Electric Hover, complete, price......\$10.00
Shipping weight about 18 lbs.
22-inch Electric Hover, complete, price......\$12.50

Shipping weight about 30 lbs.

Send for pamphlet fully describing this wonderfull little machine.

#### THE O. K. CHICK MARKING BAND

These leg bands are made of aluminum, and are adjustable to three sizes. When formed up as shown at A it is just right for the newly-hatched chick, and is so light that the little fellow never knows that his is banded at all.

As the chick grows you do not have the trouble of changing bands and hunting up corresponding numbers. You simply let this band out to the next slot, and there is no possibility of getting the wrong number or making a mistake.

Price 15 cents per dozen; 75 cents per hundred. Lettered or numbered as ordered. Postage, 2 cents per dozen; 4 cents per hundred.

#### ECONOMY HOVER

Complete with cage; showing construction of lamp, lamp box and lamp slide. Perfectly rat proof, and the most convenient hover made.

No. 1 Hover with wire cage......\$9.00 Shipping weight, about 25 lbs.

No. 2 Hover with wire cage......\$12.50 Shipping weight, about 43 lbs.

Prices do not include Postage, Express or Freight Charges.

#### IMPROVED DROP BOTTOM FOUNTAIN

The two cylinders forming the body of the fountain are sealed, making a dead air space between them.

This construction is similar to the thermos bottle and gives the very best protection from both heat and cold.

No. 1. 1 gallon size......\$2.25 Shipping weight, 51/2 lbs.

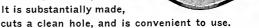
No. 2. 2 gallon size.....\$2.75 Shipping weight, 7 lbs.

No. 3. 4 gallon size.....\$3.25 Shipping weight, 12 lbs.



#### **POULTRY PUNCHES**

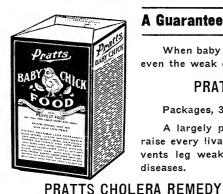
The Pettey Poultry Punch for marking chicks by punching the web of the feet is made of steel, nickel plated. It is substantially made.



. \$0.25



## ANIMAL REGULATOR VETERINARY REMEDIES



#### A Guaranteed Pratt Remedy for Most Poultry Diseases

When baby chicks come, keep them healthy and growing and bring even the weak ones along by feeding.

#### PRATTS BUTTERMILK BABY CHICK FOOD

Packages, 30c and 60c. 14 lbs. for \$1.35. 100-lb. sacks, \$8.00.

A largely predigested baby food for baby chicks. Guaranteed to raise every livable chick. Costs a cent a chick for three weeks. Prevents leg weakness, white diarrhoea, "pasting up" and other chick diseases.



More work out of your horses, more milk from your cows, fatter hogs-these are a few of the benefits which come from using

#### PRATTS ANIMAL REGULATOR

Costs less than a cent a day per horse or cow. This is the original and pioneer stock regulator of America. Tested thoroughly for nearly half a century, its worth is known and recognized by stock owners the world over. Always sold on a guarantee that it will satisfy you or money back. Packages 30c, 60c and \$1.20. 12-lb. pail, \$2.50.

25 lbs., \$4.00. 100-lb. bags, \$12.00.

From gratifying experience poultrymen have learned that the disgusting disease known as Sore-Head or Chicken Pox can be successfully treated with

receipt of price. 30c and 60c.

ORE HEAD

ICKEN PO

REMED

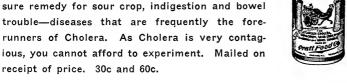
#### PRATTS SORE-HEAD AND CHICKEN-POX REMEDY

Cures Cholera when it comes-that is guaran-

teed. Used regularly, will prevent its coming. A

60c and 30c. It acts quickly, checking the spread of the contagion and curing the sores.

We guarantee a sure, rapid cure if Pratts Sore-Head (Chicken Pox) Remedy is used.



#### KILL THE HEAD LICE

Head lice are the unsuspected cause of the death of thousands of Baby Chicks; other thousands are left in weakened condition—an easy prey to disease later on.



#### PRATTS HEAD LICE OINTMENT

Kills Head Lice instantly. It soothes. heals and is admirable for all parasitic trouble, 30c.



#### PRATTS HEAVE, COUGH AND COLD REMEDY

100 LBS.

USE NO HOOKS

KEEP DRY

**PRATTS** 

PRATT FOOD CO.

PHILADA, CHICAGO, TORONTO

**FOOD** 

BABY CHICK

is a positive remedy for heaves, coughs, cold and catarrh. A single day's treatment helps the worst case of heaves. Several doses show a vast improvement, and in a few days the cough will stop and the breathing be natural. 60c and \$1.20.

# Pratts,

# POULTRY REGULATOR POULTRY REMEDIES

### SATISFACTION GUARANTEED OR MONEY REFUNDED





Healthy birds and lots of eggs, the two big things in poultry raising, are made certain by giving

#### PRATTS POULTRY REGULATOR

100-lb. bags, \$10.00; 25-lb. pail, \$3.00; 12-lb. pail, \$1.75; packages, \$1.20, 60c and 30c.

It builds up vitality, insures sound digestion, sharpens appetite and prevents disease, thus putting birds into condition for heavy egg laying or winning blue ribbons.

Pratts is the original Poultry Regulator of America and is in use by the most successful poultry raisers everywhere. When regularly used, hens lay throughout the year.

It will prevent chicken cholera, gapes, roup, rheumatism, expel worms, prevent leg weakness and egg eating. It will greatly improve turkeys, geese, ducks, pigeons and guineas, insuring quick growth and keeping them free from disease.



Don't let ROUP cut your profits. The sure and easy "ounce of prevention" against this dangerously contagious disease is

#### PRATTS ROUP REMEDY

Tablets or Powder, \$1.20, 60c, 30c.

Quickly absorbed by the blood, purifies the system, reduces fever, allays inflammation. The safe remedy for roup, colds, catarrh and all bad weather diseases. If poultry keepers would regularly spray the chicken houses, roosts, dropping boards and utensils with

#### PRATTS POULTRY DISINFECTANT

only \$1.00 a gallon, most all their troup pisinfectables would vanish.

Three times as powerful as crude carbolic acid. A sure deodorizer, germicide and liquid lice killer. Use it for roup, colds and other contagious diseases.

Half-gallon, \$1.00; quart, 60c; 1 gallon, \$1.75; 5 gallon, \$7.50; 10 gallons, \$13.50.



ratts, Poultry

Get rid of lice on your poultry, in nests, dustbaths, incubators and elsewhere in a day's time by using

#### PRATTS POWDERED LICE KILLER

30c and 60c.

Effective, non-poisonous, non-irritating. It quickly and thoroughly kills all lice on little chicks, big chicks, setting hens and incubator chicks. It rids horses, cattle, hogs, dogs and cats of lice, and destroys ticks on sheep. It destroys insects and bugs on vines, plants and flowers. Drives out moths from closets, furniture, carpets and clothing.

The time to save baby chicks from white diarrhoea, the most deadly of all chick diseases, is before they get it. Begin with the first drink of water, as soon as they are hatched, and use

# PRATTS WHITE DIARRHOEA REMEDY

Remember the germs are in the chicks when hatched, being transmitted from the egg. Keep the germs from becoming active by using this remedy.

Packages 30c and 60c.





# MAKES HUSKY CHICKS

Conkey's, the Original Buttermilk Starting Feed

#### WHAT IT IS

Conkey's Buttermilk Starting Feed is a perfectly balanced ration for baby chicks to be fed over the critical first eight weeks. It contains clean, wholesome grain and is mixed with pure, sweet buttermilk.

#### CAUTION-DON'T BE MISLED BY INFERIOR BUTTERMILK **FEEDS**

Conkey's is the original buttermilk feed, and although the first price may be higher than inferior articles, the subsequent results make it the cheapest food on the market. Buttermilk is the intestinal cleanser and as we employ it, its full value is maintained, which means that it is very strong in lactic acid, thus counteracting foreign bacteria in the intestines which cause so much White Diarrhoea in chicks and loss of life.

While buttermilk is such an important item in our Feed. the word "buttermilk" might cover up inferior grains in any Feed. We use nothing but clean, wholesome grains-not byproducts nor sweepings.

#### WHAT IT DOES

READ WHAT THE DOCTOR WRITES Milwaukee, Route 1, Ore,

Routledge Seed & Floral Co. Routledge Seed & Floral Co.

Gentlemen: Having spent considerable time, study, care and money to get the lines of heredity we wished for our "Reds," it was most disappointing to find we were unable to develop the chicks into ideal specimens of the breed; finally we observed that heredity only counts as fifty per cent in the production of a bird and environment the other fifty. To us the principal feature of environment is feed, which must be easily digested and nutritious, causing a rapid, vigorous growth; AFTER YEARS OF EXPERIMENTING with foods; we find CONKEY'S BUTTERMILK STARTING FEED IS THE BEST for the FIRST MOUTHFILL: in fact, we never take our birds for the FIRST MOUTHFUL; in fact, we never take our birds

or the FIRST MOUTHFUL; in fact, we never take our birds entirely off this feed.

Mr. Routledge being the first person to call our attention to Conkey's Buttermilk Mash, is entitled to sincerest thanks for our phenomenal success this year, as WE HAVE NOT LOST A CHICK THROUGH SICKNESS and our show winnings (the largest of any Pacific Coast breeder), were mainly due to con-Sincerely yours, DR. N. L. SMITH dition. NLS-RA

Breeder S. C. Rhode Island Reds.



FOLLOW WITH CONKEY'S BUTTERMILK GROWING

Conkeys

Buttermilk



Don't Worry Conkey Will Cure Me



# **Have a Conkey Corner** in Your Poultry House

### **CONKEY'S POULTRY TONIC**



Contains no cayenne pepper. It is a laying tonic, molting powder and regulator of a high type and is prepared with the same care that has made the efficiency of Conkey Poultry Remedies world famous. A little in the feed of breeding birds in early spring means vitality and strength in the hatching eggs.

It helps growing stock get more value out of their feed and keeps them hardy and thrifty through their growing and feathering period. It builds up the tired organs and run-down systems of molting birds after heavy laying, puts them through the molt quickly, and starts them laying again with the least possible loss of time. Hens in the molt need every attention you can give them. Bear that in mind. For laying, put a little Poultry Tonic in the dry mash or the wet feed every day. It helps hens earn their board, especially when egg prices are soaring and every egg means money.

You can give Conkey's Poultry Tonic to every bird in your flock every day in the year. It will pay you well to help your birds.





## **HEALTHY POULTRY PAYS**



CONKEY'S ROUP REMEDY. Roup is perhaps the most common contagious disease of the poultry yard. Once started, it is likely to affect most of your birds. It is a disease that is easily detected through its peculiar, disagreeable symptoms. As soon as cold, damp weather starts, colds appear and these are likely to develop into roup, with fatal results.

Conkey's Roup Remedy is an effective aid for preventing roup as well as a good means for saving fowls already affected. Always have a package on hand, especially during cold, rainy weather. Package 30c, 60c, \$1.25; 5-lb. can, \$7.25.

CONKEY'S WHITE DIARRHOEA REMEDY. Will help save your chicks from this fatal, contagious chick disease. Once started, white diarrhoea often sweeps away the whole hatch. Conkey's prevents its spread and saves affected chicks. Treat promptly. 30c, 60c.

CONKEY'S SORE-HEAD REMEDY. For treating Sorehead, Pigeon Pox, Warts, Pian and the dangerous, contagious Chickenpox. 30c, 60c.

CONKEY'S LICE POWDER. Your hens can't do their best if body lice are



CONKEY'S Lice Powder.

Conkey's Lice Powder and you will keep them free from vitality sucking lice. Packages 15c, 30c, 60c.

CONKEY'S NOX-I-CIDE. The germicide, dip and disinfectant with a hundred uses about the home, poultry yard and on the farm. Germs cause and spread most poultry diseases. Noxicide mixes with water and makes a cheap, effective, ready-to-use germ destroyer. Cleans and purifies coops, houses, runs, brooders, founts and utensils. A reliable disinfectant for barns and outhouses. Unequalled for household use or for the sick room. 1 pt., 50c; 1 qt., 75c; 2 qts., \$1.25; 1 gal., \$2.00; 5 gals., \$50.00. and outhouses. Unequ \$9.50; 10 gals., \$18.50.

## INSECTICIDES AND FUNGICIDES

The control of insects and fungi is imperative in every garden. Plants must be protected from their enemies, if they are to produce most luxuriantly in flower and fruit. There are three kinds of these enemies—fungous diseases or blights, insects, which eat the foliage, and insects which suck the sap of the plants. The following kinds of materials are the very best on the market for controlling plant enemies, and by the judicious use, your plants will be protected from the destructive bugs and blights.

SLUG SHOT, Hammond's. Guaranteed to destroy potato bugs and those on tomato and egg plants, currant worms, cabbage lice and worms.

HELLEBORE, POWDERED WHITE. Less poisonous than Paris Green and safe to use when fruit is nearly ripe.

TOBACCO DUST. For dusting plants affected with aphis; also used on squash vines and melons, and now largely used for fumigating.

PARIS GREEN. We handle Paris Green in season. Put up in  $\frac{1}{4}$ ,  $\frac{1}{2}$ , 1 and 5-lb. cans. Price on application.

BORDEAUX MIXTURE. The best fungicide for curing and preventing black rot, mildew, blight, leaf curl, scab or other fungoid diseases on fruits and plants. Ready for use by simply adding water.

ANT EXTERMINATOR. A non-poisonous powder which, if scattered about their haunts or runs will kill or drive away ants from lawns.

BUG DEATH. A fine non-poisonous powder and in composition is peculiar to itself, inasmuch as it does not depend upon arsenic for its killing power. Bug Death is safe and sure to use on potatoes, tomatoes, currants, gooseberries, cucumbers, melons, egg plants and garden truck generally. Apply at the rate of about 12 pounds Bug Death per acre.

Dickey Duster. A very convenient and practical implement for applying Bug Death and other powders to plants.

"BLACK LEAF 40" is a concentrated solution of nicotine sulphate, guaranteed to contain 40 per cent nicotine by weight. It is a contact insecticide. It kills insects by being absorbed through their breathing organs and skins when brought into contact with their bodies. Being highly concentrated, it is easy to handle and mixes readily with water when diluted for use. It does not clog spray nozzles, nor does it injure foliage at the dilutions recommended. Mix 1-oz. bottle with 8 gallons of water.

FISH OIL SOAP (Commonly known as Whale Oii Soap). An excellent wash for trees and plants where insects and eggs effect the bark. Dissolve 1 pound in  $\frac{1}{2}$  gallon hot water, then add 10 gallons cold water.

### **FERTILIZERS**

For the intensive cultivation of plants in the home garden and grounds, fertilizers play a very important part. Frequently the soil which forms the lawn, flower beds or garden has been the base of some hill carted away. It is practically sterile in its productiveness. It is useless for plant growth, except through the application of fertilizers. The following fertilizers represent the best for the home garden and the lawn.

#### WRITE FOR SPECIAL PRICES IN QUANTITIES

SHEEP MANURE, Pulverized (Wizard Brand). A pure natural manure, unequaled for mixing with potting soils or lawns, general vegetable and flower garden fertilizer. It makes the richest, safest and quickest liquid manure. For use in liquid form, one pound to five gallons of water will make a liquid which can be used with safety daily. An application of 100 lbs. to 1,000 square feet of lawn, gives a rich, green effect all summer.

BONE PHOSPHATE. This is a very fine pure white powder, containing a total of 28 to 30 per cent of Phosphate Acid, 26 per cent of which is guaranteed available. For use by the florist or vegetable gardener it is superior to any other phosphatic feed on the market.

NITRATE OF SODA or Chili Saltpetre. Nitrate of Soda is not a substitute for other manures, but recommended as the cheapest and best form in which to apply

nitrogen to plants. As a liquid use Nitrate of Soda at rate of one ounce to two gallons of water.

MAGIC MANURE ASH FERTILIZER. Is the ashes from manure, contains 6 per cent total potash. They take the place of wood ashes, and give a great deal better all around results, and do not make the muss that wood ashes do, and are especially valuable as a potash proposition; are used extensively for top dressing.

LIME (Raw Rock Ground). This floricultural raw Rock Lime is for either under glass work, the lawn or the field. Analyzes 95 per cent pure carbonate of lime. Carbonate of lime sweetens the soil where it has become sour, and clammy by continued cultivation. It revivifies the soil; releases the phosphoric acids and potash in the soil that has been heretofore unavailable, preventing stem rot, smut and fungus growth.

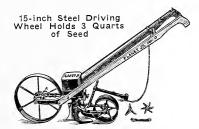
## The Greatest Cultivating Tools are



# Planet Jr. Garden Tools

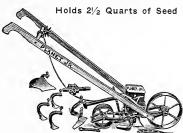


They do the work of 3 to 6 men—quicker, better, cheaper. They put old-time methods "out of business" wherever used, because they can't compete with Planet Jr. labor, time and money-savers. Made light, yet strong and durable by a practical farmer and manufacturer with over 40 years' experience. Every tool guaranteed.

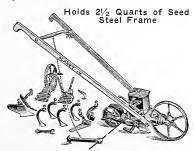


A tavorite among onion growers, market gardeners and seedmen.

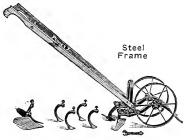
NO. 3 PLANET JR. HILL AND DRILL SEEDER sows all garden seeds accurately in hills or drills. Sows in a narrow line making wheel hoe cultivation quick and easy.



NO. 4 PLANET JR. COMBINED HILL AND DRILL SEED-ER, WHEEL HOE AND PLOW. Sows seed accurately and works quickly, easily, thoroughly. Wonderful all-around garden tool and money-saver.



NO. 25 PLANET JR. COMBINED HILL AND DRILL SEEDER, DOUBLE WHEEL HOE, CULTIVATOR AND PLOW has automatic feed stopping device, valuable seeder index and complete set of cultivator attachments. Indestructible Steel Frame.



NO. 11 PLANET JR. DOUBLE WHEEL HOE, CULTIVATOR, PLOW AND RAKE works both sides of plants thoroughly and rapidly at one passage until crops are 20 inches high. This fine tool has indestructible steel frame and steel leaf-

THE PLANET JR. DOUBLE WHEEL HOES are the greatest cultivating tools in the world for the onion and small sugar beet grower, and also for every grower of garden crops from drilled seed. They do more and do it better and easier than can possibly be done in any other way.

NO. 12 DOUBLE WHEEL HOE, CULTIVATOR AND PLOW. This tool is identical with No. 11 Wheel Hoe, except that it has one pair plows, one pair hoes, two pairs cultivator teeth and a pair of leaf-lifters only, and is sold at correspondingly less price. The tools sold with No. 12 are what gardeners use most, and the others can be added as wanted.



NO. 16 PLANET JR. SINGLE WHEEL HOE, CULTIVATOR, RAKE AND PLOW is light, handy, and adapted to almost every garden use. Has leaf guard for close work, and lasting steel frame.

NO. 17 PLANET JR. SINGLE WHEEL HOE. You can do more and better hoeing with it in one day than you can in three days with a hand hoe. The No. 17 as a pair of 6-inch hoes, a plow and a set of cultivator teeth, an outfit sufficient for most garden work.

NO. 171/2 PLANET JR. SINGLE WHEEL HOE. This tool is identical with No. 16, except in equipment. The pair of 6-inch hoes, three cultivator teeth and leaf-lifter which go with it are all the finest of their kind.

Two acres a day may easily be worked with this implement, and when it is done, it will be a better job than several men could have done in the same time with hand hoes.

	· ·
	NUMBER OF PLANTS TO THE ACRE AT GIVEN
GERMAN FRENCH SPANISH ITALIANArtischokeArtichautAlcachofaArticiocca	DISTANCES
SpargelAspergeEsperragoSparagio	Dist. apart. No. plt 12x 1 in522,720
Krupp-BohnenHaricot NainsFrijole nanoFaginola Nani Stangen-BohnenHaricot a RamesHibichuelas enridaderasFaginolo rampicanti	12x 3 in174,240
SalatrubenBetteraveRemolachaBarbabietola	12x12 in 48,560 16x 1 in392,040
SpargelkohlChou BrocoliBroculiBrocoli utsRosenkohlChou de BruxellesBerbz de BruselsCavolo di Brusselles	18x 1 in343,480 18x 3 in116,160
Kopfkohl, KrautChou pommeCol repolloCavolo cappuccio	18x12 in 29,040
yWirsingChou de MilanCol de MilanCavolo di Milano Carotten, MohrenCarotteZanahoriaCarota	18x18 in 19,360 20x 1 in313,635
BlumenkohlChou-fleurColiflorCavolofloreSellerieSedano	20x20 in 15,631
Knoll-SellerieCelem-raveApio-naboSedano-rapa	24x 1 in261,360 24x18 in 15,520
KerbelCerfeuilPerifolloCerfoglioCicorienwurzelChicoree sauvageAchicoriaCicero selvatica	24x24 in 10,890
BlatterkohlChou cabuCabu	30x 1 in209,022 30x 6 in 34,343
FeldsalatMacheCanonigosValeriana MaisMaisMaizMais	30x16 in 13,063 30x20 in 10,454
Garten-KresseCresson alenoisMastuerzoAgretto	30x24 in 8,712
BrunnenkresseCresson de fontaineBering	30x30 in 6,970

Brussels Sprouts.	. Rosenkohl	Chou de Bruxelles	Berbz de Brusels	Cavolo di Brusselles
Cabbage	, Kopfkohl, Kraut	Chou pomme	Col repollo	Cavolo cappuccio
Cabbage Savoy	.Wirsina	Chou de Milan	Col de Milan	Cavolo di Milano
Carrot	Carotten, Mohren	Carotte	Zanahoria	Carota
Cauliflower	Blumenkohl	Chou-fleur	Coliflor	Cavoloflore
Celery	Sellerie	Celeri	Apio	Sedano
Celeriac	Knoll-Sellerie	Celem-rave	Apio-nabo	Sedano-rapa
Chervil	Kerbel	Cerfeuil	Perifollo	Cerfoglio
Chicory	.Cicorienwurzel	Chicoree sauvage	Achicoria	Cicero selvatica
Collards	Blatterkohl	Chou cabu	Cabu	
Corn Salad	Feldsalat	Mache	Canonigos	Valeriana
Corn	.Mais	Mais	Maiz	Mais
Cress	Garten-Kresse	Cresson alenois	Mastuerzo	Agretto
Cress, Water	Brunnenkresse	Cresson de fontaine	Berro	Nasturzio aquatico
			Pepino	
Dandelion	Lowenzahn	Pissenlit	Diente de leon	Dente di leone
			Berengena	
Endive	Endivien	Chicoree Endive	Endivia	Indivia
Kale	Blatterkohl	Chou frise	Breton Col	Cavolo verde
Kohl-Rabi	Kohlrabi	Chou-rave	Colinabo	Cavolo rapa
Leek	Porree, Lauch	Poireau	Puerro	Porro
			Lechuga	
Melon, Musk	.Melone	Melon muscade	Muscate	Lattuga
Melon, Water	Wasser-Melone	Melon d'Eau	Zandia	Melone d'aqua
Mushroom	Champignonbrut	Champignon	Seta	Fungo partaiolo
Mustard	Senf	Moutarde	Mostaza	
			.Capuchina	
Okra	Ocher	Gombaud	.Quimbombo	Ocra
			.Cebolla	
Parsley	Petersilie	Persil	Perejil	Prebbemolo
Parsnip	.Pastinake	Panais	.Chirivia	Pastinaca
Peas	Erbsen	Pois	Chicaroso Guisantes	Pisello
Pepper	Pfeffer	Piment	Pimiento	Peperone
			Calabaza totanera	
			Rahanito	

 
 Radish
 Radies
 Radis
 Rabanito
 Ravenello

 Rhubarb
 Rhubarde
 Ruibarbo
 Rabarbaro

 Salsify
 Haferwurzel
 Salsifis blanc
 Salsifi blanco
 Sassefrica

 Spinach
 Spinat
 Epinard
 Espianaca
 Spinace

 Squash
 Kulchen-Kurbiss
 Courge
 Calabaza
 Zucca

 Tomato
 Llebesanfel, Tomate Pomme d'Amour
 Tomate
 Pomo d'ore

 Turnip
 Weisse-Rube
 Navet
 Nabo
 Navone
 REFERENCE TABLES

QUANTITY OF SEED REQUISITE TO PRODUCE A GIVEN NUMBER OF PLANTS AND SOW AN ACRE

SOW AN
Quantity per acre
Artichoke, 1 oz. to 500 plants 6 oz.
Asparagus, 1 oz. to 300 plants Asparagus Roots1000 to 7250
Asparagus Roots1000 to 7250
Barley 2½ bu.
Beet, Mangel, 1 oz. to 100 ft. of drill 5 lbs.
Beans, dwarf, 1 pt. to 100 ft. of drill 11/4 lbs.
Beans, pole, 1 pt. to 100 hills
Beet, garden, 1 oz. to 100 ft. of drill / IDS.
Broccoli, 1 oz. to 5,000 plants
Buckwheat
Buckwheat
Cauliflower, 1 oz. to 5,000 plants.
Celery, 1 oz. to 15,000 plants.
Chicory 5 lbs.
Clover, Alsike and White Dutch10 to 15 lbs.
Clover, Alfalfa or Lucerne15 to 25 lbs.
Clover, Crimson Trefoil10 to 15 lbs.
Clover, Mammoth and Medium 8 to 12 lbs.
Collards, 1 oz. to 5,000 plants.
Corn, rice (shelled)
Corn, sweet, 1/4 pt. to 100 hills 6 qts.
Cress, 3/4 oz. to 100 ft. of drill12 lbs. Cucumber, 1 oz. to 100 hills1 to 3 lbs.
Dill, $\frac{1}{3}$ oz. to 100 ft. of drill 1 lbs.
Egg Plant, 1 oz. to 2,000 plants 4 oz.
Endive, $\frac{1}{4}$ oz. to 100 ft. of drill $\frac{4}{2}$ lbs.
Flax, broadcast
Garlic, bulbs, 1 lb. to 10 ft. of drill.
Gourd, 2 oz. to 100 hills.
Grass, Blue, Kentucky 2 bu.
Grass, Blue English 1 bu.
Grass, Hungarian and Millet
Grass, Meadow Fescue 1 bu.
Grass, Mixed Lawn3 to 5 bu. Grass, Red Top Fancy8 to 10 lbs.
Grass, Red Top, Unhulled20 to 28 lbs. Grass, Timothy
Grass, Timothy

**ENGLISH** Artichoke ....

Asparagus ... Beans, Dwarf. Beans, Pole... Beet ..... Broccoli .....

Quantity per a	ıcre
Grass, Orchard, Perennial Rye, Woodrow	
Meadow 2	bu.
	bu.
Hemp	
Horse Radish Roots10,000 to 15	,000
Kale, 1 oz. to 5,000 plants, or 200 ft. of drill.	
Kohl-Rabi, 1/3 oz. to 100 ft. of drill 4	lbs.
Leek, $\frac{1}{3}$ oz. to 100 ft. of drill 4	lbs.
Lettuce, 34 oz. to 100 ft. of drill 3	lbs.
Martynia, 1 oz. to 100 ft. of drill 5	lbs.
Melon—	
Musk, 1 oz. to 100 hills1 to 3	lbs.
Water, 4 oz. to 100 hills	lbs.
Nasturtium, 2 oz. to 100 ft. of drill15	lbs.
Okra, 1 oz. to 100 ft. of drill 8	lbs.
Onion Seed, 1/3 oz. to 100 ft. of drill 4 to 5	lbs.
Onion Seed, for Sets40 to 80	lbs.
Onion Sets, 1 qt. to 40 ft. of drill 8	bu.
Parsnip, 1/2 oz. to 100 ft. of drill 3	lbs.
Parsnip, $\frac{1}{4}$ oz. to 100 ft. of drill 3 Parsley, $\frac{1}{4}$ oz. to 100 ft. of drill 3	lbs.
Peas, garden, 1 pt. to 100 ft. of drill.1 to 3	bu.
Peas, field 2	bu.
Pepper, 1 oz. to 1.500 plants.	
Pumpkin, 1/3 lb. to 100 hills 3 to 4	lbs.
Radish, 2/2 oz. to 100 ft. of drill10 to 12	lbs.
Ruta Baga2 to 4	lbs.
Rye 1½	bu.
Sage in drills4 to 5	ibs.
Salsify, 34 oz. to 100 ft. of drill 8	lbs.
Spinach, $\frac{1}{2}$ oz. to 100 ft. of drill 8	lbs.
Summer Savory 34	lbs.
Sunflower 8	lbs.
Squash, Summer, 4 oz. to 100 hills 2	lbs.
Squash, Summer, 4 oz. to 100 hills 2 Squash, Winter, 8 oz. to 100 hills 2	lbs.
Tomato, 1 oz. to 4,500 plants.	
Tobacco 1 oz to 5.000 plants.	
Turnin, 1 oz. to 250 ft. of drill1 to 3	lbs.
Vetches, Spring90 to 120	lbs
Vetches, Winter30 to 60	lbs
•	

STANDARD WEIGHTS OF

60x60 in.... 8x 1 ft.... 8x 3 ft.... 10x 1 ft.... 10x 6 ft.... 10x10 ft.... 12x 1 ft.... 12x 5 ft.... 12x12 ft.... 16x 1 ft....

16x16 ft.....

30x24 iii.... 6,970 36x 3 in.... 53,030 36x12 in.... 14,520 36x18 in.... 8,630 36x36 in... 4,340 42x12 in.... 12,446

42x12 in. 12,446
42x24 in. 6,223
42x36 in. 4,142
48x12 in. 10,390
48x18 in. 7,790
48x24 in. 5,445
48x30 in. 4,356
48x36 in. 3,630
48x48 in. 2,722
60x36 in. 2,901
60x48 in. 2,173
60x60 in. 1,742
8x 1 ft. 5,443

5,443 1,215 680 4,360 726

435 2,630 736 302 2,722

170

#### 40 sq. rods make.....1 rood 4 roods make.....1 acre 640 acres make....1 sq. mile SURVEYORS' OR LAND MEASURE

7.92	inches make1 link
25	links make1 rod
4	rods make1 chain
10	sq. chains make1 acre
160	sq. rods make1 acre
640	acres make1 sq. mlle
26	sq. miles make 1 town-
	ship



## MEMORANDA

Successors to American Seed C.
1. 192 200 W. Weatherford S.
Fort Worth, Texas

# BELL BRAND



TESTED SEEDS